

### **CITY OF MIAMI GARDENS**

### COMPREHENSIVE DEVELOPMENT MASTER PLAN TRANSPORTATION ELEMENT DATA INVENTORY AND ANALYSIS

**MARCH 2006** 

DRAFT

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### **CHAPTER II – TRANSPORTATION ELEMENT**

### DATA, INVENTORY AND ANALYSIS

### **EXISTING TRANSPORTATION SYSTEM**

### Inventory

This section of the Miami Gardens Transportation Master Plan presents a detailed inventory of the existing facilities and services. Information herein is presented in primarily a graphic format with supplemental text. There are many levels of connectivity in Miami Gardens, from major interstates, regional rail transit, and sub regional county and state roads, to prevalent pedestrian and bicycle facilities.

The focus is on an inventory of:

- the major roadway network
- number of roadway lanes
- roadway functional classification
- parking facilities
- railroads
- pedestrian facilities
- bicycle facilities
- airport facilities

### The Roadway Network

Miami Gardens has an ample street network set up on a grid system, based on County Section Line Roads, spaced every mile in both the north/south and east/west directions. This grid system could be considered interrupted, since four of eight streets traverse the city end to end in the east/west direction, and only four of ten traverse the city end to end in a north/south direction.

### Through Roads

### East/West

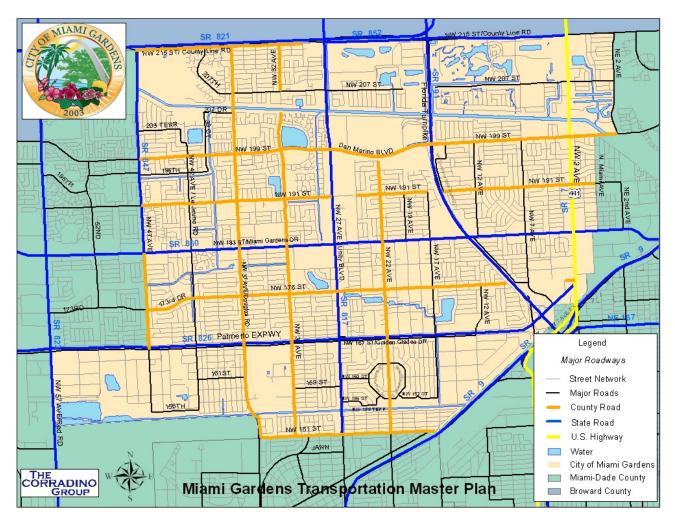
- NW 215 St (SR 852)
- NW 199 St
- NW 183 St (SR 860)
- SR 826

#### North/South

- NW 37 Ave
- NW 27 Ave (SR 817)
- NW 2 Ave (SR 7)
- SR 91 (Florida's Turnpike)

Ample connectivity to and through Miami Gardens is provided by a well developed hierarchy of streets. The City's lone US Highway is US-441, (SR-7 or NW 2<sup>nd</sup> Ave). Six

State Roads border or cross the City. Nine County facilities exist in the City. Other major roads exist connecting the State and County facilities. Inside the section lines is the local street network, which consists of mainly local streets, which provide for neighborhood access.



**The Roadway Network** 

**Note:** As part of the future transportation plan there are no proposed changes to the above map.

#### Number of Lanes

There are six "6-lane" roadways. These consist of US-441, Florida's Turnpike, NW 27 Ave, NW 183 St, SR 826, and a portion of NW 199 St (Dan Marino Blvd) to the south of Dolphins Stadium. There are nine segments of road with four lanes. The bulk of the through transportation, (non neighborhood) or regional traffic moves on these facilities.



**Existing Number of Lanes** 

### Roadway Functional Classification

One interstate highway (Principal Arterial) moves adjacent to the city, this is Interstate 95, which connects several major facilities at the Golden Glades Interchange, which is a major hub of roadway connectivity. At this location the only two expressways that go through the City (also Principal Arterials) connect, these are Florida's Turnpike and the Palmetto Expressway (SR 826). Other principal arterials include a portion of NW 57 Ave, NW 27 Ave and NW 2 Ave. There are also six minor arterials servicing the City. Minor Collectors connect the local street system to these major more regional facilities.



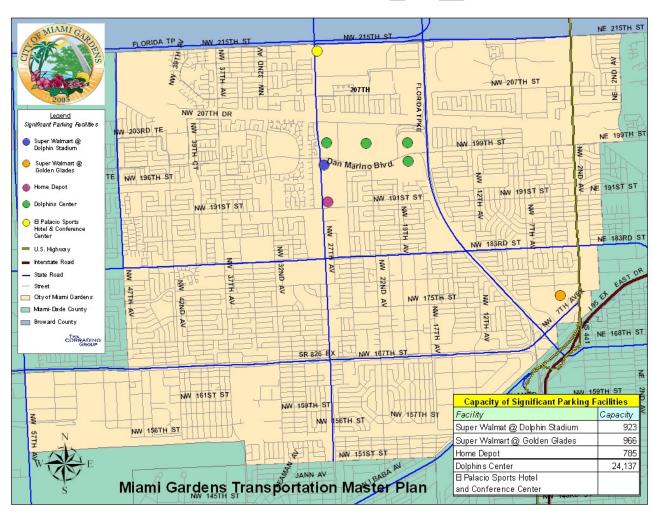
**Roadway Functional Classification** 

**Note:** As part of the future transportation plan there are no proposed changes to the above map.

### Parking Facilities

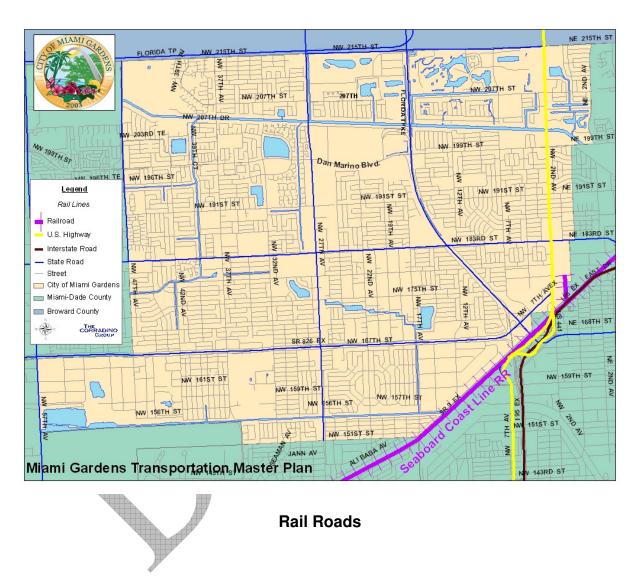
There are several ample parking facilities in the City, but they are all private. These are generally located on the main local spine of the community along NW 27 Ave or near Dolphins Stadium. These range anywhere from 785 spaces to 24,137 spaces (at the stadium).

# Parking Facilities



### Rail Roads

One rail facility is located along the south east boundary of the City. This is the CSX tracks which carry the TriRail trains through the Golden Glades Interchange between the Miami International Airport, and north to West Palm Beach County.

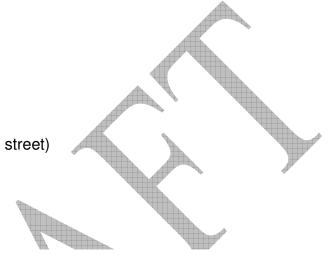


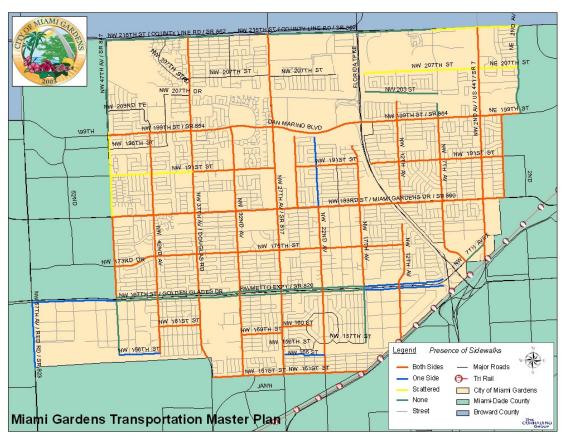
**Note:** As part of the future transportation plan there are no proposed changes to the above map.

### Bicycle and Pedestrian Facilities

Sidewalks can be found throughout the City. Major streets with sidewalks on both sides of the street:

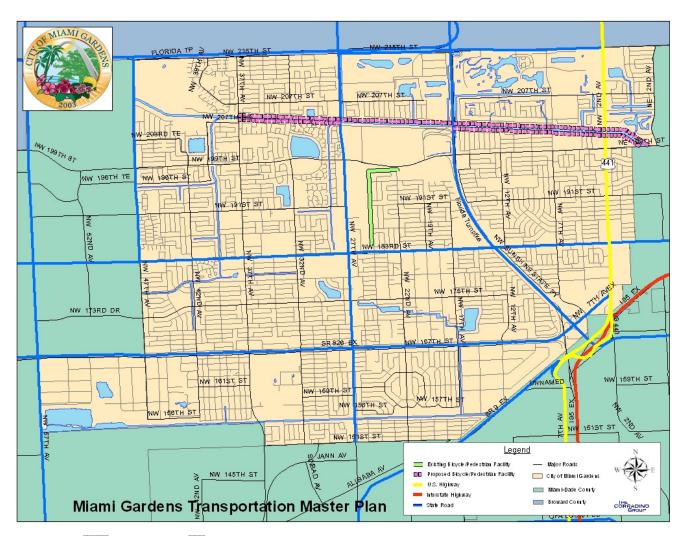
- NW 199 St
- NW191 St (east of NW 37 Ave)
- NW 183
- NW 175 St
- NW 151 St
- NW 42 Ave
- NW 37 Ave
- NW 32 Ave
- NW 27 Ave
- NW 22 Ave (south of 183<sup>rd</sup> street)
- NW 17 Ave
- NW 12 Ave
- NW 7 Ave
- NW 2 Ave





### **Presence of Sidewalks**

There is only one existing bicycle facility in the City, it essentially runs north approximately one mile from NW 183 St (east of NW 27 Ave) to Dan Marino Boulevard to the south of Dolphins Stadium



**Existing and Currently Planned Bicycle facilities** 

### Airports / Seaports

There are no airports nor seaports in Miami Gardens, but the Opa-Locka Airport is immediately adjacent to the City. Maintenance of such facilities shall continue to be provided by Miami-Dade County Aviation Dept.



**Note:** As part of the future transportation plan there are no proposed changes to the above map.

### Transit and Additional Transportation Data

Twenty-two transit bus routes operate in Miami Gardens, twenty sponsored from Miami Dade Transit and two from Broward County Transit. About 72,000 passengers board these routes on the average weekday. Weekday boarding's equate to about 1.5 million, of the 1.9 million monthly boarding's. The most popular routes include BCT Route 18, which carries about 321,000 boarding's each month. MDT Route 77 accounts for over 258,000 boarding's each month. MDT Route 27 accounts for over 224,000 boarding's per month. Headways range from 15 to 60 minutes. Nine routes have headways of 20 minutes or less.

	Avorago	Boarding	g's By Day of	Week	Current	TOTAL
Routes	Average Weekday	Weekdays	Saturdays	Sundays	Headways (minutes)	Monthly Boarding's
E	1,201	26,425	1,875	1,401	30	29,702
G	2,794	61,465	10,034	8,113	15	79,612
2	3,510	77,231	9,799	4,831	40	91,861
17	4,335	95,362	16,605	7,171	30	119,138
21	2,311	50,840	7,970	3,629	15	62,439
22	3,768	82,896	11,168	7,091	15	101,154
27	8,375	184,258	26,573	13,783	60	224,614
29	769	16,922	N/A	N/A	30	16,922
32	3,752	82,545	10,605	4,380	30	97,530
42	1,443	31,737	5,005	3,514	30	40,255
73	2,161	47,539	3,713	1,411	30	52,663
75	2,985	65,664	3,003	1,809	20	70,476
77	9,952	218,938	25,028	14,413	15	258,379
83	4,060	89,316	9,836	6,892	15	106,044
91	1,296	28,508	2,641	1,508	30	32,658
95	1,690	37,170	» N/A	N/A	30	37,170
97	633	13,925	N/A	N/A	15	13,925
99	641	14,102	2,128	1,175	30	17,404
241 – North Dade Conn	285	6,269	N/A	N/A	30	6,269
246 – Night Owl	400	8,799	1,684	1,710	60	12,193
BCT – Route 2	4,749	103,248	20,650	13,766	20	137,664
BCT – Route 18	11,076	240,781	48,156	32,104	15	321,041

Sources: Miami-Dade Transit Ridership Technical Report – June 2005

Broward County Transit Development Plan FY 2005 - FY 2009

Headways of 20 min or less

The following tables contain many of the information provided above, plus additional ones such as condition of roadway pavement, Right-of-Way (ROW) encroachments, etc.



East-West	t Corridors	<b>)</b>				MIAMI GA	RDENS TMP			
	Roadway	Γ	Functional Classification	Presence of	Proposed Bicycle	Condition of Road	ROW Encroachments	Bus Routes	Headways - 20 minutes or less	Rapid Transit
Name	From	То	Classification	Sidewalks	Facilities	Pavement	Encroachments	noutes	illillutes of less	Within 72 mile
NW 215 <sup>th</sup> St	NW 47 Ave	NW 37 Ave	N/A	None	Yes	7.5	None	N/A	N/A	No
	NW 37 Ave	NW 27 Ave	N/A	None	Yes	6	None	N/A	N/A	No
	NW 27 Ave	NW 17 Ave	Minor Arterial	None	Yes	7.5	None	Route 91	No	No
	NW 17 Ave	NW 7 Ave	Minor Arterial	None	No	7.5	None	Route 91	No	No
	NW 7 Ave	NW 2 Ave	Minor Arterial	Scattered	Yes	7	None	Route 91	No	No
	NW 2 Ave	NE 2 Ave	Collector	Scattered	Yes	7	None	Route 91	No	No
NW 207 St	NE 2 Ave	TPK	Local	Scattered	Yes	6.5	Trees and Parked Cars	Route 91	No	No
	TPK	NW 37 Ave	Local	Both	Yes	10	Trees and Signs	Routes 2, 27, and 97	Routes 27 and 97 – Yes; Route 2 – No	No
NW 203 St	TPK	NW 7 Ave	Local	None	Yes	7	None	N/A	N/A	No
NW 199 <sup>th</sup> St	NW 47 Ave	NW 37 Ave	Minor Arterial	Both	Yes	8	None	Route 91	No	No
	NW 37 Ave	NW 27 Ave	Minor Arterial	Both	No	8	None	Route 27 – Yes; Route 91 – No	No	No
	NW 27 Ave	NW 17 Ave	Minor Arterial	Both	Yes	9	None	N/A	No	No
	NW 17 Ave	NW 7 Ave	Minor Arterial	Both	No	7	None	Routes 17 and 75	No	No

	NW 7 Ave	NE 2 Ave	Minor Arterial	Both	No	6.5	None	Routes 77 and 95 – Earlington Heights	Yes	Yes
East-Wes	t Corridors	<b>;</b>				MIAMI GA	RDENS TMP			
	Roadway		Functional	Presence	Proposed	Condition of	ROW	Bus	Headways - 20	Rapid Transit
Name	From	То	Classification	of Sidewalks	Bicycle Facilities	Road Pavement	Encroachments	Routes	minutes or less	within ½ Mile
NW 191 <sup>st</sup> St	N Miami Ave	TPK	Collector	Both	Yes	8	Parked Cars	N/A	N/A	No
	NW 17 Ave	NW 24 Ave	Local	Both	Yes	8	Trees and Parked Cars	Route 17	No	No
	NW 27 Ave	NW 37 Ave	Collector	Both	Yes	7	Trees and Parked Cars	Route 27	Yes	No
	NW 37 Ave	NW 47 Ave	Collector	Scattered	Yes	5	Parked Cars	Route 32	Yes	No
NW 183 <sup>rd</sup> St	NW 47 Ave	NW 37 Ave	Minor Arterial	Both	Yes	10	None	Routes 83 and 95 – Carol City	Yes	Yes
	NW 37 Ave	NW 27 Ave	Minor Arterial	Both	Yes	10	None	Routes 27, 83, and 95 – Carol City	Yes	Yes
	NW 27 Ave	NW 17 Ave	Minor Arterial	Both	Yes	9	None	Routes 83 and 95 – Carol City	Yes	Yes
	NW 17 Ave	NW 7 Ave	Minor Arterial	Both	No	10	None	Routes 17, 75, and 83	Routes 17 and 75 – No; Route 83 – Yes	No
	NW 7 Ave	N Miami Ave	Minor Arterial	Both	No	10	None	Routes 75, 77, 83, and 95 – Earlington Heights	Routes 77, 83, 95 – Yes; Route 75 – No	Yes

East-West	t Corridors	•				MIAMI GA	RDENS TMP			
	Roadway From	То	Functional Classification	Presence of Sidewalks	Proposed Bicycle Facilities	Condition of Road Pavement	ROW Encroachments	Bus Routes	Headways - 20 minutes or less	Rapid Transit within ½ Mile
	1									
NW 175 <sup>th</sup> St.	NW 12 Ave	NW 17 Ave	Collector	Both	Yes	7	Cars and Furniture	Routes 42, 75, and 95 – Carol City	Routes 42 and 75 – No; Route 95 – Yes	Yes
	NW 17 Ave	NW 27 Ave	Collector	Both	Yes	7	Trees and Parked Cars	Routes 42, 75, and 95 – Carol City	Routes 42 and 75 – No; Route 95 – Yes	Yes
	NW 27 Ave	NW 37 Ave	Collector	Both	Yes	6	Trees and Parked Cars	Route 75	No	No
	NW 37 Ave	NW 47 Ave	Collector	Both	Yes	9	Trees and Parked Cars	Route 75	No	No
NW 167 <sup>th</sup> St	NW 57 Ave	NW 47 Ave	Local	North Side	No	8	None	N/A	N/A	No
	NW 47 Ave	NW 37 Ave	Local	None	No	8	Trees at NW 39 Ct	Routes 32 and 241	Route 32 – Yes; Route 241 – No	No
	NW 37 Ave	NW 27 Ave	Local	None	Yes	8	None	N/A	N/A	No
	NW 27 Ave	NW 17 Ave	Local	None	No	8	None	Routes 21, 22, 241, and 246	Routes 21, 241, and 246 – No; Route 22 – Yes	No
	NW 17 Ave	SR 9	Collector	South Side	Yes	6	None	Routes 22, 241, and 246	Route 22 – Yes; Routes 241 and 246 – No	Yes

East-West	Corridors		MIAMI GARDENS TMP										
		_											
R	Roadway		Functional	Presence of	Proposed Bicycle	Condition of Road	ROW	Bus	Headways - 20	Rapid Transit			
Name	From	То	Classification	Sidewalks	Facilities	Pavement	Encroachments	Routes	minutes or less	within ½ Mile			
	1	•	1	1	•								
NW 161 <sup>st</sup> St	NW 42 Ave	NW 37 Ave	Local	Both	Yes	8	None	N/A	N/A	No			
NW 160 <sup>th</sup> St/Bunche Park Dr.	NW 27 Ave	NW 17 Ave	Local	Both	Yes	6	Parked Cars	Route G	No	No			
NW 159 <sup>th</sup> St	NW 32 Ave	NW 27 Ave	Local	Both	Yes	7	Parked Cars	N/A	N/A	No			
NW 156 <sup>th</sup> St	NW 47 Ave	NW 42 Ave	Collector	North Side	Yes	7	Trash	N/A	N/A	No			
NW 155 <sup>th</sup> St	NW 27 Ave	NW 22 Ave	Local	South Side	No	6.5	Parked Cars	N/A	N/A	No			
NW 151 <sup>st</sup> St	NW 37 Ave	NW 27 Ave	Collector	Both	Yes	8	None	Routes E, 32, 42, 241	Routes E, 42, and 241 – No; Route 32 – Yes	No			
	NW 27 Ave	NW 17 Ave	Collector	Both	No	7	None	Routes E, 42, and 241	No	No			

North-Sc	outh Corri	dors				MIAMI	GARDENS TMP			
	Roadway	/	Functional	Presence	Proposed	Condition	ROW	Due Deutee	Headways - 20	Rapid Transit
Name	From	То	Classification	of Sidewalks	Bicycle Facilities	of Road Pavement	Encroachments	Bus Routes	minutes or less	within ½ Mile
NW 57 <sup>th</sup> Ave	NW 167 St	Biscayne Canal	Other Principal Arterial	East Side	No	9	None	Routes 75 and 95 – Carol City	Route 75 – No; Route 95 – Yes	Yes
NW 47 <sup>th</sup> Ave	NW 215 St	NW 199 St	Minor Arterial	None	Yes	7.5	None	Route 32	Yes	No
	NW 199 St	NW 183 St	Minor Arterial	Scattered	Yes	7	None	Route 32	Yes	Yes
	NW 183 St	NW 167 St	Minor Arterial	Both	No	8	None	Route 32	Yes	Yes
	NW 167 St	NW 156 St	Collector	None	No	5	None	Route 32	Yes	No
NW 42 <sup>nd</sup> Ave	NW 156 St	NW 167 St	Collector	Both	Yes	8	None	Route 32	Yes	No
	NW 167 St	NW 183 St	Collector	Both	Yes	9	Parked Cars	N/A	N/A	No
	NW 183 St	NW 199 St	Collector	Both	Yes	7	Parked Cars	N/A	N/A	No
NW 37 <sup>th</sup> Ave	NW 215 St	NW 199 St	Minor Arterial	Both	No	8	None	Route 27	Yes	No
	NW 199 St	NW 183 St	Minor Arterial	Both	No	8	None	Route 27	Yes	Yes
	NW 183 St	NW 167 St	Minor Arterial	Both	No	8	None	N/A	N/A	Yes
	NW 167 St	Biscayne Canal	Minor Arterial	Both	No	8.5	None	Route 32	Yes	No

North-Sc	outh Corric	dors				MIAM	II GARDENS TMP			
	Roadway		Functional	Presence	Proposed	Condition	ROW		Headways - 20	Rapid Transit
Name	From	То	Classification	of Sidewalks	Bicycle Facilities	of Road Pavement	Encroachments	Bus Routes	minutes or less	within ½ Mile
	•					•				
NW 32 <sup>nd</sup> Ave	NW 151 St	NW 167 St	Collector	Both	Yes	8	Trees & Cars	Route 32	Yes	No
	NW 167 St	NW 183 St	Collector	Both	Yes	7	Pedestrian Signs	Route 32	Yes	Yes
	NW 183 St	NW 199 St	Collector	Both	Yes	7	Pedestrian Signs	Route 27	Yes	Yes
NW 27 <sup>th</sup> Ave	NW 215 St	NW 199 St	Other Principal Arterial	Both	Yes	9	None	Routes 27 and 91	Route 27 – Yes; Route 91 – No	No
	NW 199 St	NW 183 St	Other Principal Arterial	Both	Yes	8.5	None	Route 27	Yes	Yes
	NW 183 St	NW 167 St	Other Principal Arterial	Both	No	8.5	None	Routes 21 and 27	Route 21 – No; Route 27 – Yes	Yes
	NW 167 St	NW 151 St	Other Principal Arterial	Both	No	8.5	None	Routes 21 and 27	Route 21 – No; Route 27 – Yes	No
NW 24 <sup>th</sup> Ave	NW 196 Tr	NW 183 St	Local	Both	Yes	8	Trees	N/A	N/A	Yes
NW 22 <sup>nd</sup> Ave	NW 196 Tr	NW 183 St	Collector	Only fronting Crestview Elementary	Yes	7	None	Route 17	No	Yes
	NW 183 St	NW 167 St	Minor Arterial	Both	Yes	6	Trees at NW 176 <sup>th</sup>	Routes 17 and 42	No	Yes
	NW 167 St	NW 151 St	Minor Arterial	Both	Yes	6	Trees at NW 162 <sup>nd</sup>	Routes G, 17, 22, 42, 241, and 246	Routes G, 17, 42, 241, and 246 – No; Route 22 – Yes	No

North-So	uth Corrid	lors				MIAI	MI GARDENS TMP			
	Roadway	T	Functional	Presence	Proposed	Conditio			Headways - 20	Rapid Transit
Name	From	То	Classification	of Sidewalks	Bicycle Facilities	of Road Pavemer	- nereachmente	Bus Routes	minutes or less	within ½ Mile
NW 17 Ave	NW 191 St	NW 183 St	Local	Both	Yes	10	Trees	Route 17	No	Yes
	NW 183 St	NW 167 St	Collector	Both	Yes	7.5	None	Route 17	No	Yes
	NW 167 St	NW 157 St	Local	None	Yes	7	None	Route 22	Yes	No
NW 13 Ave	NW 167 St	NW 155 Dr	Collector	Both	No	8.5	None	Routes 22 and 241	Route 22 – Yes, & Route 241 – No	No
NW 12 Ave	NW 202 Tr	NW 183 St	Collector	Both	Yes	Y	Trees, Signs, and parked cars	Routes 17 and 75	No	Yes
	NW 179 St	NW 167 St	Collector	Both	Yes	7.5	Trees	Routes 42 and 95 – Carol City	Route 42 – No; Route 95 – Yes	Yes
NW 7 <sup>th</sup> Ave	NW 202 St	NW 199 St	Collector	None	Yes	6	None	N/A	Yes	No
	NW 199 St	NW 183 St	Collector	Both	Yes	6	None	Routes 17, 75, 77 and 95 – Earlington Heights	Routes 17 and 75  – No; Routes 77 and 95 – Yes	Yes
	NW 183 St	NW 7 Ave Ext	Collector	Both	Yes	5	None	Route 83	Yes	Yes
NW 7 <sup>th</sup> Ave Ext	NW 7 <sup>th</sup> Ave	NW 2 <sup>nd</sup> Ave	Principal Arterial – Expressway	None	No	7.5	None	N/A	N/A	No

North-So	uth Corrid	lors				MIAI	MI GARDENS TMP			
	Roadway		Functional	Presence	Proposed	Conditio of Road			Headways - 20	Rapid Transit
Name	From	То	Classification	of Sidewalks	-10,010		Encroachments	Bus Routes	minutes or less	within ½ Mile
NW 2 <sup>nd</sup> Ave (441)	NW 215 St	NW 199 St	Other Principal Arterial	Both	No	8.5	None	N/A	N/A	Yes
	NW 199 St	NW 183 St	Other Principal Arterial	Both	No	8.5	None	Route 77	Yes	Yes
	NW 183 St	NW 171 St	Other Principal Arterial	Both	No	8.5	None	Routes 77, 83, 95 – Earlington Heights, and 241	Routes 77, 83, and 95 – Yes; Route 241 – No	Yes
NE 2 <sup>nd</sup> Ave	NE 215 St	NE 199 St	Collector	None	Yes	7	None	Route 91	No	No
N Miami Ave	NE 199 St	NE 183 St	Local	Both	Yes	7.5	Trees at NW 191 <sup>st</sup>	Routes 83 and 95 – Earlington Heights	Yes	Yes

#### TRANSPORTATION SYSTEM ANALYSIS

The analysis has been coupled with the information gathered as part of the transportation plan's public involvement process to develop a series of multimodal mobility projects in the Project Bank. One overriding principle that **transportation and land use are inextricably linked** has been used as the basis for this analysis. Quality transportation planning and land use development is best achieved if the two are closely coordinated. Transportation and land use is the framework on which our communities are built. Coordination of them creates places with high quality of life. Misalignment of them creates urban sprawl, which has negative affects on communities and regions, and in the long run may have economic consequences, as areas can loose their competitive advantage in the marketplace.

In Miami Dade County employment centers and residential centers are mainly connected by various roadways, and some transit. Most people live miles from where they work, and must take one of few connecting routes to get there. The perception is that commute times lengthen each season, and frustration mounts. Many transportation experts believe that there is a reasonable limit to the time an employee will spend in a daily commute, and subsequently outside of the house on a daily basis. Aside from the time, the cost of transportation also influences commuting patterns. Studies have shown that on average households spend about \$8,000 annually on transportation. This represents 19 percent of all household expenditures. Only housing cost households more. As fuel prices rise so do costs. In highly congested areas, higher hourly cost associated with delay is realized. This relates to lost production time and additional fuel expenditures. While this cost is initially born by the individual, it is theorized that as congestion worsens the costs shift to the employers as productivity deteriorates.

Land use, demographic, and transportation infrastructure shifts result from market pressures initiated by the cost to employees and employers. Regions begin to bear the costs as larger geographic shifts result from congestion; therefore, regional economic health is directly tied to transportation. Miami-Dade County would benefit from mitigating the ever growing commute times by further implementing growth management strategies that more adequately mix land uses. More specifically, ones that allow pockets of mixed use density, which can be supportive of transit and will allow employees to live in closer proximity to employment. These centers of more dense mixed use will need to be connected by transit and roadways.

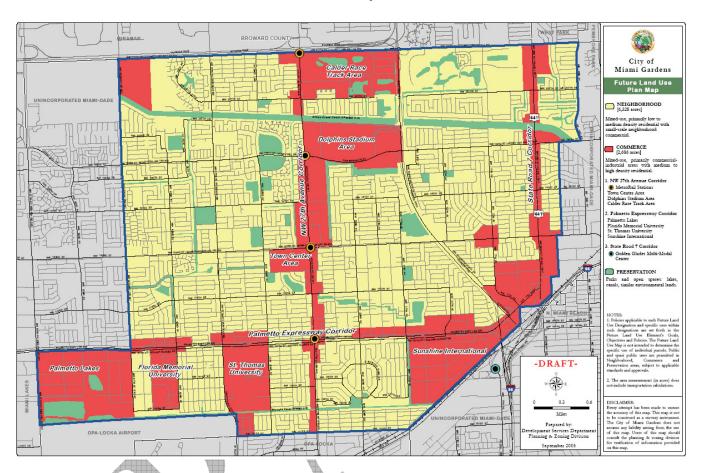
Miami Gardens' role, through this report, is to present multimodal strategies with the consensus of the community that can be implemented through the appropriate means at the City, County and State levels. These may be relative to physical capacity, transit or transportation management strategies. At a population of 105,414, Miami Gardens is the third largest city in Miami-Dade County (after Miami and Hialeah). The city is located in North-Central Miami Dade County and covers an area of approximately 20 square miles. By 2030 the population is estimated to be 141,087. Currently the vast majority of the City land area is single family residential. Commercial and industrial uses are associated with the major transportation corridors, specifically the SR-7 corridor, the NW 27 Avenue corridor and the Palmetto Expressway corridor. This trend will continue.

### Land Use

The City's Future Land Use Map, essentially reinforces this concept, and contains three future land uses designations: Commerce, Neighborhood, Preservation. The names of these three mixed use designations reflect their primary purpose. Uses within each designation will be subject to local policies that provide for intensity and density standards and well as appropriate standards for transitions between designations. The Land Development Code will enumerate these. There are over 2.600 acres of land in along these three main corridors where the City desires to focus mixed use, primarily commercial and industrial with medium to high density residential. The main corridor will be the NW 27 Avenue corridor, which is home to several major generators, such as Calder Race Track, and Dolphins Stadium. The Town Center within this corridor will be enhanced. This is located at the intersection of NW27 Avenue and NW 183 Street. Along this corridor is planned the North Corridor Metrorail Extension, which shall have four transit stations. The SR 7 corridor will also focus on this commercial designation. Similarly the Palmetto Expressway corridor has several commercial generators, including the Palmetto Lakes area, the Florida Memorial University Area, the St Thomas University Area, the Sunshine International Industrial Area and the Golden Glades Multimodal Center. Each of these commercial areas are linked. The primary nexus are at the Palmetto Expressway and NW 27 Avenue and in the area just west of the Golden Glades Interchange.

The Future Land Use Map also designates neighborhood use. There are over 6,000 acres of neighborhood use, which will consist of missed use, primarily low to medium density residential with small-scale commercial. These areas are between the transportation corridors. Preservation areas for parks, open space, lakes canals and environmental land and the landscape internal to the neighborhoods.

### **Future land Use Map**

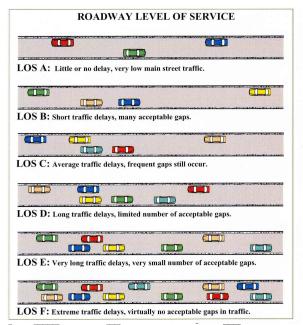


### Level of Service

Existing peak hour two way Level of Service (LOS) were examined as a measure of how the transportation system is performing The analysis of street systems is based upon the concept of level of service (LOS). The presentation of LOS is indicated by the letters "A" through "F" with LOS A representing the best operating conditions and LOS F the worst. For typical urban streets, LOS is generally expressed as a qualitative measure describing operational conditions within the traffic stream, based on service measures such as speed, travel time, delays, freedom to maneuver, traffic interruptions, comfort and convenience.

The following narratives and tables reflect LOS conditions for typical urban intersections and roadway segments.

Level of	Seconds	Description
Service	Delay/Vehicle	Description
LOS A	≤ 10	Most vehicles do not stop at all
	-	
LOS B	> 10 and ≤ 20	More vehicles stop than for LOS A
LOS C	> 20 and ≤ 35	The number of vehicles stopping is significant, although many pass through without stopping
LOS D	> 35 and ≤ 55	Many vehicles stop
LOS E	> 55 and ≤ 80	Considered being the limit of acceptable delay
LOS F	> 80	Unacceptable delay



These LOS standards represent a range of operating conditions and the driver's perception of those conditions, as described below.

- LOS A describes free-flow operations at average travel speeds, usually at about 90% of the free flow speed. Vehicles are unimpeded in their ability to maneuver within the traffic stream. On many of roads within the study area (assuming a speed limit of 35 mph) this is generally represented by a speed of 30 mph or greater.
- LOS B describes reasonably unimpeded operation at an average travel speed, usually about 70% of the free flow speed. The ability to maneuver is only slightly restricted. On many of Miami Garden's roads (35 mph) this is generally represented by average speeds of about 25 mph.
- LOS C describes stable operating conditions with some restrictions of driver ability to maneuver and change lanes in mid-block locations. Longer queues and adverse signal coordination may contribute to a lower average speed of about 50% of free flow speed. On many of Miami Garden's roads (35 mph) this is represented by average speeds of about 18 to 20 mph.
- LOS D borders on a range in which small increases in flow may cause substantial increases in delay in travel speed. LOS D may be caused by poor signal progression, inappropriate signal timing, high volumes or a combination of these factors. Average travel speed is about 40% of the free flow speed. On many of Miami Garden's roads (35 mph) this is represented by average speeds of about 15 mph.

- LOS E is characterized by significant delays and average travel speed of 33% or less of the free flow speed. LOS E may be caused by a combination of high traffic volumes, high signal density, adverse signal progression, and inappropriate signal timing, all of which result in extensive delays and longer vehicular queues at critical intersections. On many of Miami Garden's roads (35 mph) this is represented by average speeds of about 10mph.
- LOS F is characterized by urban street flow at extremely low speeds.
   Intersection congestion exists at critical signalized intersections with high delay, high volumes and extensive queuing. On many of Miami Garden's roads (35 mph) this is represented by average speeds well below 10 mph.

The table below depicts LOS and operating speeds for different types of arterial roadways.

Table 2 Average Travel Speeds

	/ \ V	erage Traver Spe	Jour	
Urban Street	I	II		IV
Class				
Range of free-	55-45 MPH	45-35 MPH	35-30 MPH	35-25 MPH
flow speeds				
(FFS)				
Typical FFS	50 MPH	40 MPH	35 MPH	30 MPH
LOS		Average Trav	rel Speed (MPH)	
A	>42	>35	>30	>25
В	>34-42	>28-35	>24-30	>19-25
C	>27-34	>22-28	>18-24	>13-19
D	>21-27	>17-22	>14-18	>9-13
E	>16-21	>13-17	>10-14	>7-9
F	<16	<13	<10	<7

### **Existing Conditions**

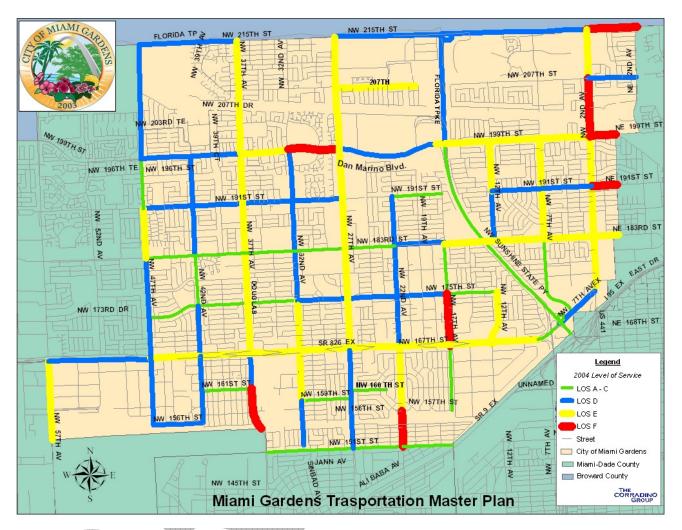
For the City of Miami Gardens' Transportation Master Plan, four colors are shown in the following maps and tables (green, blue, yellow and red). Green indicates that the roadway link is operating at or better than LOS C, meaning that in general, there is no significant congestion and the roadway segment can absorb additional traffic volumes. Blue indicates LOS D, meaning that there is additional room for more vehicles, although limited. Yellow indicates LOS E or that the roadway segment is operating right at capacity and may be able to absorb only minor amount of additional traffic volumes depending on the specific case at hand. Finally, the red is indicative of LOS F meaning that capacity may have been exceeded and that the standards have been exceeded, in others words, the roadway segment is experiencing higher traffic congestion with associated longer

delays and should not absorb significant amount of additional traffic volumes. The LOS was obtained by applying the methodology of the Yr 2000 Highway Capacity Manual and using traffic volume data from the networks of the Miami-Dade MPO's adopted Long Range Transportation Plan.

It is important for Miami Gardens to adopt LOS standards that will service its desired land use intensities, so that appropriate infill and redevelopment can take place.

Miami Gardens transportation network is set up on a grid system based on section lines and half section lines. This forms a mile to a half mile grid of roadways to carry traffic. At the present time, levels of service would be classified as adequate, with the majority of segments operating at LOS D or LOS E. Few segments are operating better than LOS C. These included portions of Florida Turnpike portions of NW183 St west of NW22 Ave. Fewer segments are operating at LOS F. These include NW 199 St between NW 32 Ave and NW 27 Ave, and again between NW 2 Ave and the City limits, most of NW 2 Ave and half mile segments on NW 37 Ave, NW 22 Ave and NW 17 Ave around the Palmetto Expressway. Most of the LOS E and F conditions are on roadway segments entering/exiting the city.



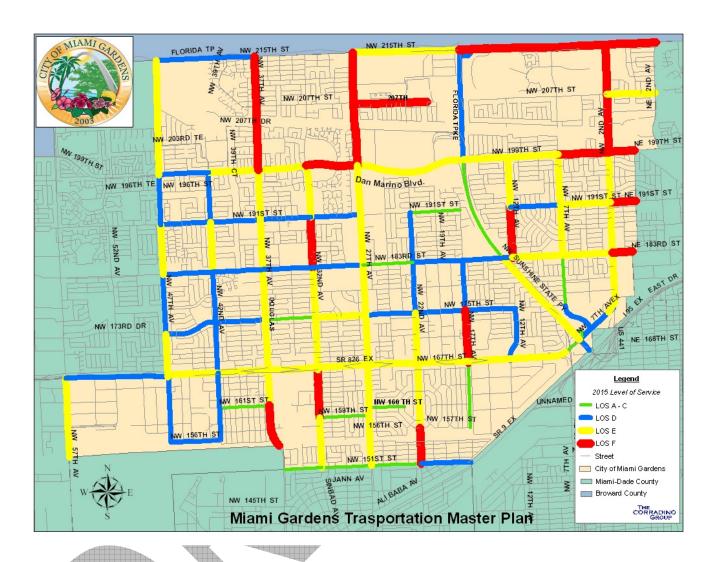


Projected Levels of Service

As indicated above, the LOS was obtained by applying the methodology of the Yr 2000 Highway Capacity Manual and using traffic volume data from the networks of the Miami-Dade MPO's Long Range Transportation Plan.

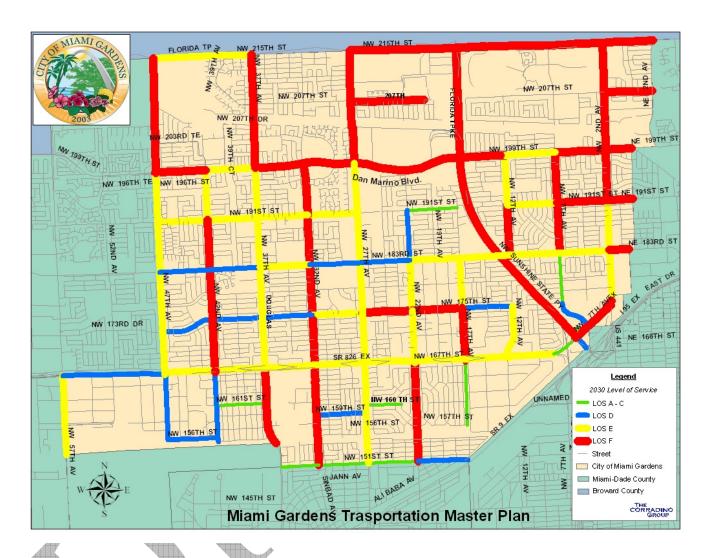
By 2015 the overall LOS begins to deteriorate. Very few segments will operate better than LOS C. The majority will be LOS D or E, which are appropriate. More will operate at LOS F. Again, these are focused on segments that enter/exit the city, particularly, both ends of NW 37 Ave, the north end of NW 27 Ave, The eastern side of NW 215 St, NW 199 St, NW 191 St and NW 183 St.

Projected Peak Hour Levels of Service for the Year 2015



By 2030 even fewer segments will operate at LOS C or better. Segments operating at LOS D or E will be confined to portions of NW 57 Ave, NW 47 Ave, NW 37 Ave, NW 27 Ave, the Palmetto Expressway, NW 183 St, and NW 191 St. Large contiguous segments of many other roadways will operate at LOS F. This includes NW 215 St, NW 199 St, the northern portion of NW 47 Ave, NW 42 Ave, The northern and southern links on NW 37 Ave, all of NW 32 Ave and Florida's Turnpike.

### Projected Peak Hour Levels of Service for the Year 2030



The analysis shows that, for the most part, existing internal circulation is moving at acceptable levels of service and that mobility is beginning to breakdown at some of the entries/exits of the community. Over time, as can be seen from the 2015 and 2030 LOS maps, conditions worsen. Please refer to the tables on the appendix for details on the LOS.

Mitigation of the future lack of mobility can take place through a focus of increasing physical capacity where feasible, increasing transit capacity, utilization of transportation management policies as well as through the use of effective growth management tools and incentives through land use policies, and concurrency management tools of infill development, redevelopment, and more dense mixed use development. As such concepts in this report have been developed in three main broad areas: Physical Capacity, Alternative Mode, and Transportation Management.

**Physical Capacity** 

Information from the public involvement portion of the Transportation Master Plan has shown that there is a perception that there are many major transportation facilities that traverse the city and are designed to provide transportation on a regional basis. Further examination shows that this is true. The Turnpike and the Palmetto Expressway are the two major expressways that carry traffic through the City. Major surface facilities include SR 7/NW 2<sup>nd</sup> Ave, NW 27 Ave, NW 37 Ave, NW 57 Ave, NW 199 St, and NW 183 St.

Stakeholders are concerned that these facilities are not sensitive to the context of the local community, and that they are merely conduits of through traffic. While it is difficult to be context sensitive with an elevated expressway, the county section line and half section line roads would be appropriate facilities to lend character for the community. In many instances there are LOS deficiencies on these facilities.

It is suggested, that where appropriate and warranted, that these facilities be maximized in right of way to provide for enough physical capacity along the links and at the intersections. This will ease congestion and improve traffic operations. In addition, underperforming intersections should be analyzed to provide enhanced flow.

There are several existing intersections that have been examined. These are listed below. Of the many intersections examined, the main issues seen are relative to poor traffic operations stemming from congestion and delays. Many of these have already been observed and remedial recommendations made. Others will need to go through more detailed operational analysis to discover the appropriate remedy, which may consist of additional turning lanes or through lanes at particular locations, as well as improvements to signal phasing and/or timing. FDOT or Miami Dade County Public Works can assist with the study of the appropriate facilities.

### MIAMI GARDENS TRANSPORTATION MASTER PLAN

### **Candidate Intersections / Roadway Links for Operational Studies**

Intersection	Issue / Concern	Requested by	Remarks	Jurisdiction
NW 27th Ave / 175th St	Need protected LT arrow NB & SB 27th Ave	Council member	Perform detailed capacity/oper analysis	FDOT
NW 27th Ave / 170th Terr	Many veh disregarding the LT prohibition on WB 170th Terr	Council member	Confirmed by field observations. Request FDOT to address. Offer solutions	FDOT
NW 27th Ave / 199 St	Congestion / operations	Council member	Perform detailed capacity/oper analysis	FDOT
NW 27th Ave / 207 St	Congestion / operations -long delays for residents on 207 St	Council member/citizens	Perform detailed capacity/oper analysis	FDOT
NW 27th Ave / 215 St NW 12th Ave / M Gardens	Operations - SB LT - congested, veh going past intersection & making U-turns	Citizen	Perform detailed capacity/oper analysis	FDOT
Dr	Congestion / operations	Council member	Perform detailed capacity/oper analysis	City
NW 12th Ave / 191 St	Congestion / operations	Council member	Perform detailed capacity/oper analysis	City
NW 12th Ave / 199 St	Congestion / operations	Council member	Perform detailed capacity/oper analysis	City
SR 826 Service Rd / 27 Ave	Veh accident prone / confusing signage	Council member	Request FDOT to address. Offer solutions	FDOT
SR 826 Service Rd / Ramps 17 ave to 57 Ave	Inconsistencies between stop and yield signs application and weaving conflicts	Council member/citizens	Request FDOT to address. Offer solutions	FDOT
NW 17th Ave / 183rd St	operational concerns w/existing signal placement in SB direction, school xing	Council member	Request FDOT to address. Offer solutions	FDOT
NW 32nd Ave / 159 St	Operations	TCG	Perform detailed capacity/oper analysis	County
NW 32nd Ave / 175 ST	Operations	TCG	Perform detailed capacity/oper analysis	County
NW 47th Ave / 191 St	Operations	TCG	Perform detailed capacity/oper analysis	FDOT
NW 2nd Ave / 207 St	Need protected LT arrow SB on 2nd Ave	Citizen	Perform detailed capacity/oper analysis	FDOT
NW 2nd Ave / 215 St	Congestion / operations	TCG	Perform detailed capacity/oper analysis	FDOT
NW 2nd Ave / 191 St	Operations	TCG	Perform detailed capacity/oper analysis	FDOT
NE 2nd Ave / 215 St	Operations	TCG	Perform detailed capacity/oper analysis	City
N Miami Ave / 191 St	Operations	TCG	Perform detailed capacity/oper analysis	City
NW 37th Ave / 207 St	Operations	TCG	Perform detailed capacity/oper analysis	County
NW 37th Ave / 199 St	Operations	TCG	Perform detailed capacity/oper analysis	County
NW 37th Ave / 191 St	Operations	TCG	Perform detailed capacity/oper analysis	County
NW 37th Ave / 175 St	Operations	TCG	Perform detailed capacity/oper analysis	County
Miami Gardens Dr	Delays, poor signal progression	Council member/citizens	Request M-D Public Works to address or do signal progression study on arterial	FDOT
NW 2nd Ave/US 441	Delays, poor signal progression	Council member/citizens	Request M-D Public Works to address or do signal progression study on arterial	FDOT

#### MIAMI GARDENS TRANSPORTATION MASTER PLAN

#### Candidate Intersections / Roadway Links for Operational Studies

Intersection	Issue / Concern	Requested by	Remarks	Jurisdiction
			Request M-D Public Works to	
		Council	address or do signal	
NW 27th Ave	Delays, poor signal progression	member/citizens	progression study on arterial	FDOT
			Request MD Public Works to	
		Council	address. Offer potential	
NW 12th Ave	speeding /safety school xing	member/citizens	solutions	City
		Council		
NE 2nd Ave	Traffic intrusion/ speeding / safety	member/citizens	Perform traffic calming study.	City
		Council		
N Miami Ave	Traffic intrusion/ speeding / safety	member/citizens	Perform traffic calming study.	City
		Council		
NW 207th St	Traffic intrusion/ speeding / safety	member/citizens	Perform traffic calming study.	City
		Council		
NW 175th St	Traffic intrusion/ speeding / safety	member/citizens	Perform traffic calming study.	County

A review of many of these facilities has revealed that the rights of way (ROW's) are wide and generally unfriendly to the pedestrian. There are many schools in the City. On afternoons after these are dismissed, large numbers of children walk home or to and from after school activities. Crossing the large thoroughfares can be potentially hazardous. An accommodation to remedy this situation in these high pedestrian periods would be impact full. New traffic signal phasing, Pedestrian level lighting, count down pedestrian-signals and enhanced signage would be examples. Attractive landscaping is lacking in the area. This type of treatment is important in developing community pride and character. Often speeds on these facilities can be high. This coupled with multiple ingress and egress points from peripheral land uses creates congested and potentially dangerous conditions. Programs such as FDOT's Livable Communities Initiative as well as various access management techniques would assist. Miami Gardens is interested in having these facilities focus on serving the surrounding uses, and becoming attractive components in the community. Roadway capacity can also be enhanced by connecting interrupted portions of the section line and half section line network wherever possible. This would provide for a connected grid and utilization of its dispersal ability to move traffic on parallel routes to common origins and destinations.

### Alternative Modes

As time progresses, land use changes focused on improving vitality will be implemented along these major corridors. This will lend to the attractiveness of the city as a place of business. The thought is develop employment and residential centers in the City, which will provide incentive to the commuter, who currently drives through Miami Gardens to live, work or shop in the area. This will serve the City and the region by shortening commute times. Metrorail along the North Corridor will be integral to this.

Additionally there is a feeling that the bus transit does not adequately service the local community. There is a call for a community circulator. A review of the bus routing reveals that most of the routes also move through the community connecting with other destinations. Most of the major roadways have bus routes on them. The routing is regional in nature. This may require several transfers for a rider to reach an in-city destination. A circulator may help in this respect. The bulk of the transit routes are focused along the Palmetto, Golden Glades, NE 167 ST and NW 22 Ave corridors.

Overall Miami Gardens is highly accessible with the automobile bus and rail transit. This fact bodes well for the future development of the City, and is a tremendous asset. M-Dade Transit, FDOT, and M-Dade County have done well in providing connectivity. Enhancing these connections within the city and making them more local in nature is the focus of Miami Gardens.

Most of the city is well served by sidewalks. These should be enhanced when possible. Additionally, pedestrian and bicycle facilities along canal right-of ways should be implemented and coordinated with county plans. Bicycle lanes should be implemented on roadways as appropriate. As transit stations are developed appropriate bicycle and pedestrian facilities should connect them.

### Transportation Management

Within the realm of traffic management, the fields of access management and transportation demand management (TDM), are key policy components of the transportation network. Access management relates to how people physically access an area. TDM, relates more management or policy related methods, as opposed to physical tools for traffic control. The following describes both.

### **Access Management**

As defined by the Transportation Research Board, Access Management programs seek to limit and consolidate access along major roadways, while promoting a supporting street system, unified access and circulation systems for development. The result is a roadway that functions safely and efficiently for its useful life, becoming a more attractive corridor.

- 1. **Provide a Specialized Roadway System:** Different types of roadways serve different functions. It is important to design and manage roadways according to the primary functions that they are expected to serve.
- 2. **Limit Direct Access to Major Roadways:** Roadways that serve higher volumes of regional through traffic need more access control to preserve their traffic function. Frequent and direct property access is more compatible with the function of local and collector roadways.
- 3. **Promote Intersection Hierarchy:** An efficient transportation network provides appropriate transitions from one classification of roadway to another. For example, freeways connect to arterials through an interchange that is designed for the transition. Extending this concept to other roadways results in a series of intersection types that range from the junction of two major arterial roadways, to a residential driveway connecting to a local street.
- 4. Locate Signals to Favor Through Movements: Long, uniform spacing of intersections and signals on major roadways enhances the ability to coordinate signals and to ensure continuous movement of traffic at the desired speed. Failure to carefully locate access connections or median openings that later become signalized, can cause substantial increases in arterial travel times. In addition, poor signal placement may lead to delays that cannot be overcome by computerized signal timing systems.
- 5. Preserve the Functional Area of Intersections and Interchanges: The functional area of an intersection or interchange is the area that is critical to its safe and efficient operation. This is the area where motorists are responding to the intersection or interchange, decelerating, and maneuvering into the appropriate lane to stop or complete a turn. Access connections too close to intersections or interchange ramps can cause serious traffic conflicts that result in crashes and congestion.
- 6. Limit the Number of Conflict Points: Drivers make more mistakes and are more likely to have collisions when they are presented with the complex driving situations created by numerous conflict points. Conversely, simplifying the driving task contributes to improved traffic operations and fewer collisions. A less complex driving environment is accomplished by limiting the number and type of conflicts between vehicles, vehicles and pedestrians, and vehicles and bicyclists.
- 7. **Separate Conflict Areas:** Drivers need sufficient time to address one set of potential conflicts before facing another. The necessary spacing between conflict areas increases as travel speed increases, to provide drivers adequate perception and reaction time. Separating conflict areas helps to simplify the driving task and contributes to improved traffic operations and safety.
- 8. Remove Turning Vehicles from Through Traffic Lanes: Turning lanes allow drivers to decelerate gradually out of the through lane and wait in a protected area for an opportunity to complete a turn. This reduces the severity and duration of conflict between turning vehicles and through traffic and improves the safety and efficiency of roadway intersections.

- 9. Use Non-traversable Medians to Manage Left-Turn Movements: Medians channel turning movements on major roadways to controlled locations. Research has shown that the majority of access-related crashes involve left turns. Therefore, non-traversable medians and other techniques that minimize left turns or reduce the driver workload can be especially effective in improving roadway safety.
- 10. Provide a Supporting Street and Circulation System: Well-planned communities provide a supporting network of local and collector streets to accommodate development, as well as unified property access and circulation systems. Interconnected street and circulation systems support alternative modes of transportation and provide alternative routes for bicyclists, pedestrians, and drivers. Alternatively, commercial strip development with separate driveways for each business forces even short trips onto arterial roadways, thereby reducing safety and impeding mobility.

### **Transportation Demand Management**

Transportation Demand Management (TDM) is defined as the use of incentives, disincentives, and market management to affect travel behavior to shift to non-motorized and/or higher-occupancy modes, reduce or eliminate the need to travel, and/or shift travel onto less congested routes. TDM is also used to mean the provision or expansion of alternatives to Single Occupancy Vehicle (SOV) travel, such as transit, bicycling, and walking. In recent years TDM has been targeted in federal legislation as potentially important pieces of the overall strategy to address congestion and air quality issues.

This section describes programs or initiatives that can be included in such TDM strategies. It then discusses the programs made available in our region, by the South Florida Commuter Services (SFCS). It is recommended that the City of Miami Gardens, coordinate and implement TDM strategies, in partnership with the South Florida Commuter Services.

Transportation Management Associations (TMA's), like SFCS are organizations that operate within a city, district or are made up of employers in a district or city. They are formed to assist in the planning and coordinating and implementing of TDM measures, and to provide the private sector with an organized means of providing input into public sector planning, decision-making, and project development.

The goal of TMA's is synergistic, in that individual employers will be able to create more effective TDM programs by pooling their resources with other employers than they would be able to alone. TMA's are especially beneficial to their smaller members who are able to offer their employees more transportation options than they would be able to in isolation.

Transportation Demand Management can be grouped into three general categories:

- Alternative Transportation Modes
- Alternative Work Schedules and Sites
- Incentives and Disincentives

### **Alternative Modes**

Carpooling is done between at least two people who desire to share driving duties and/or costs, using their own private vehicles. These are either arranged independently or with the assistance of a ride matching service. SFCS provides matching service in our region. Often carpools are more formalized, to the extent that the vehicles are provided by an employer, a Transportation Management Association, a private contractor, or a public agency.

Often the provider also assists in the creation of the carpools and the administration of the program, although in some cases the two tasks are handled by separate entities. This is more similar to vanpooling which is done with larger groups. These consist of 7-to-15 passenger vans which are used instead of automobiles. In general, vanpools are only used for longer commute trips due to time, cost, and convenience factors.

### Ridesharing

The concept behind ridesharing is fairly straightforward; reduce the number of vehicles on the road by shifting drivers of single-occupant vehicles into multi-occupant vehicles. In part because of this, ridesharing is the most widely utilized and most commonly recognized of all the TDM measures. The two oldest and most common forms of ridesharing are carpooling and vanpooling.

### Ride matching

Although, not exactly alternative transportation mode, ride matching is integral to ridesharing. Ride matching is a service that assists individuals in the creation or expansion of carpools and vanpools, and also provides information on vanpool and transit routes, and the location of park-and-ride lots. Such a service can be limited to a specific employer or an individual site, or it can be organized through a regional ride matching provider. The actual service can be as simple as a bulletin board or as complex as a GIS-based computer system.

### Walking and Bicycling

Two of the most basic transportation modes which TDM measures try to encourage are bicycling and walking. People begin and end each trip as a pedestrian. In some areas within Miami Gardens, the urban environment precludes convenient walking and bicycle trips. These are frequently seen as hazardous. Many urban design and management techniques can be developed to make these trips more attractive. These include:

- use of FDOT Livable communities initiative
- · colored and or textured crosswalks

- sidewalks around individual sites
- wide curb lanes for bicyclists
- facilities to allow pedestrians and bicyclists to bypass natural and man-made barriers
- off-road bicycle paths
- designated bike lanes (with appropriate striping and signing)
- sidewalks on both sides of arterial and collector streets
- traffic control devices allowing pedestrians to safely cross at intersections
- bicycle-sensitive loop detectors to enable bicyclists to trip traffic signals
- showers and locker rooms at individual sites
- adequate bicycle storage facilities at individual sites

# High Occupancy Vehicles (HOV) Lanes

Any vehicle carrying more than two occupants gets to bypass back-ups and cut commute time by an average of 20 minutes a day by using an HOV lane. HOV lanes re-open to all traffic during non-commute hours.

# Land Use Techniques

Land use and transportation cannot be separated. Transportation inadequacies, are symptomatic of land use decisions. Again, while not an alternative mode, land use techniques are mentioned in this category because of their importance in encouraging the use of alternative modes. Land use techniques that enhance the viability of alternative modes center primarily around zoning requirements to encourage high density, mixed-use development that is easily accessible to transit, and provides quality bicycle, pedestrian, and transit links between homes, shops, and jobs.

## **Alternative Work Schedules**

Alternative work schedules (AWS) is a TDM technique that seeks to relieve congestion by shifting the hours an employee reports to and leaves work. The types of AWS are:

## Compressed Work Week

Employees work more hours per day, but work fewer days per week. The most common programs involve employees working four 10-hour days in a one week period, or working 80 hours in nine days during a two-week period.

# Flextime

Employees are allowed to set their own workday start and finish times, provided that they work an agreed upon number of hours. Generally, employees are required to be at work during a "core" period each day (for example, between 9 a.m. and 3 p.m.).

# **Telecommuting**

Employees are enabled to work at a location other than their conventional office, in order to reduce or eliminate their normal commute. The most common alternative site is the employee's home, although in some cases "satellite" work offices are also used. Additional costs associated with telecommuting from an employee's home may be covered entirely by the employer, entirely by the employee, or jointly between the two. Costs may include computer hardware and software, additional phone lines, and utility costs. Telecommuting is most often applied on a part-time basis, with the majority of participants only telecommuting one or two days per week.

# Staggered Work Hours

Employees' work times are staggered in such a way that their arrival and departure times are spread over a longer period of time.

#### Incentives and Disincentives

These are measures which motivate people to use a particular mode. Incentives generally focus on the cost and convenience of particular items.

# Parking Management

The availability and cost of parking are key factors underlying travelers' choice of travel mode. In short, if parking is expensive and scarce, individuals will be more likely to select alternative modes of transportation such as transit and ridesharing. A range of methods to alter parking supply and costs involving both the public and private sector are available. Measures that can be used by municipalities include:

- Establishing differential parking fees at public parking facilities, based upon the number of vehicle occupants, with single-occupant vehicles paying the highest fee.
- Reserving the most desirable parking locations at public parking facilities for high occupancy vehicles.
- Installing on-street parking controls (meters, timed zones, neighborhood preferential parking).
- Imposing parking pricing through regulations.
- Placing controls on the amount of parking built and operated in an area.
- Altering parking codes to discourage oversupplying parking.
- Giving High-Occupancy-Vehicles (HOVs) priority in constrained parking situations.
- Eliminating or monthly discounts favoring long-term commuter parking.

Transportation Allowances and Other Financial Incentives

In order to encourage the use of transportation alternatives, a number of different incentives are available. The majority of such incentives are usually provided by

employers and developers; however, there are several incentives that can be provided by the public sector. Employer-based incentives include the following:

# General Transportation Allowances

Employer provides each employee with a fixed amount of money to cover their transportation costs, regardless of the commute mode which is selected. Parking fees are generally increased in combination with the allowance in one of two ways: Parking fees are increased by an amount equivalent to the allowance. In this way, individuals are provided with an incentive to use a transportation alternative, yet they are still not penalized for driving. Parking fees are increased by an amount greater than the allowance. In this way, individuals are penalized for driving, while users of alternatives are not. Often the excess revenue which is collected from single-occupant-vehicles (SOV's) is used to help fund the allowance program.

# **Targeted Transportation Allowances**

Employer provides those employees who travel by selected modes with a set amount of money to cover their transportation costs. The most frequently used allowance is a free or reduced-cost transit pass, although in some cases the allowance is broadened to include carpooling, vanpooling, bicycling, and/or walking.

# New Vanpooler Benefits

In order to attract new vanpoolers, employers cover all or part of the fares for the first several months of usage.

# Miscellaneous Financial Incentives

Employer provides those employees who travel by selected modes with incentives which, although they are not a direct payment, still provide a financial benefit to users of alternative modes. Examples include:

- Allowing the use of fleet vehicles for ridesharing.
- Providing free or discounted fuel for pooling vehicles.
- Providing free or discounted maintenance and repair for pooling vehicles.
- Providing free or discounted equipment for users of alternative modes.
- Awarding additional vacation time to users of alternative transportation modes.

Financial incentives under the control of public agencies include:

# New Vanpooler Benefits

In order to attract new vanpoolers, a local agency pays for all or part of the vanpool fares for the first several months of usage.

#### HOV Facilities/Park-and-Ride Lots

HOV facilities serve as an incentive for people to use buses, carpools, and vanpools by providing travel time savings to them. Generally, an HOV lane is available to buses and

vehicles with 2 or more occupants, although in some cases it is limited to buses only. Such facilities are generally oriented to serve the downtown core of a metropolitan area along radial corridors, and are focused on downtown oriented work trips. In many cases the facilities are in operation only during the morning and afternoon peak periods.

## Transit Fare Incentives

A local agency provides employers with the opportunity to purchase transit passes at reduced fees, which the employers then provide to their employees for a free or reduced price.

Park-and-Ride lots are often developed in conjunction with HOV facilities, although they are also used in areas that do not have a designated HOV facility. In general, park-and-ride lots are developed to serve as a collection point for individuals using HOV modes such as transit, vanpooling, and carpooling.

# No-Drive Days

The concept behind no-drive day programs is to reduce congestion and air pollution problems by restricting the number of vehicles that are allowed to use the roadways. Although mandatory no-drive days have been established in several foreign cities, including Athens and Mexico City, only voluntary no-drive days have been tried in the United States, most notably in Phoenix and Denver. Generally, such programs are aimed at private automobile users and are tied to their license plate numbers

# **Pricing Measures**

Pricing measures related to TDM can be classified under one of the following three categories:

- General Tolls: Flat fees that users of a transportation facility are charged regardless of the time of day that the facility is used. The same fee is enforced throughout the day.
- Congestion Tolls: Variable fees that users of a specific transportation facility are charged that are dependent upon the time of day that the facility is used.
- Generally, congestion tolls are set at a relatively high level during peak periods, and are set at a very low rate (or eliminated altogether) during off-peak periods.

# Area wide Pricing Measures

Congestion tolls that motor vehicle users are charged for entering a congested zone, regardless of the facility that is utilized. Of these measures, only general tolls have been used extensively to date. However the primary reason for using tolls on such facilities is not to manage transportation demand. Instead, the major impetus for using tolls to date has been to provide another means to finance a facility that otherwise may not have been built. Congestion tolls and area wide pricing measures have been studied and proposed for implementation in several areas of the United States over the past 25 years. Some have been successfully implemented in California and Texas, while others have not due primarily to public opposition.

# Trip Reduction Ordinances

Trip reduction ordinances (TRO's) are local, regional, or state regulations requiring developer and employer participation in the implementation of TDM. TRO's can be applied based on a variety of different criteria, including number of employees, size of development, type of development, and motor vehicle trip generation. In most cases, the key component of the TRO is the creation and implementation of a TDM plan. Generally, TDM plans must include a description of what measures will be used to meet the requirements of the TRO, and a timetable for implementing the TDM program. Once an initial plan has been developed, it is then reviewed and updated on a regular basis by a regulatory agency. If the review shows the plan is not meeting the requirements of the TRO, further action is often required. The enforcement of TRO's can vary widely, from no penalties at all (in voluntary programs) to a scale of fines for failing to meet the requirements of the TRO. Generally, fines are not assessed if an entity fails to meet trip reduction requirements. In most cases, punitive action is taken only if an entity fails to make a good- faith effort to meet the requirements of a TRO.

# Complementary Incentives

Although the measures described above are generally regarded as the most effective means of encouraging the use of transportation alternatives, several other TDM measures are also often identified as playing a complementary role, primarily by addressing the reasons individuals frequently give for using SOVS. These measures include:

- Providing fleet vehicles for at-work trips, in order to offset the need to drive a
  personal vehicle to work for work-related use during the day.
- Providing shuttle service between multiple sites of an individual employer, to
  offset the need for a personal vehicle to make at-work trips between sites.
- Providing on-site day care, to offset the need for a vehicle to pick up and drop off children before and after work.
- Providing mid-day shuttle service to nearby activity centers, to offset the need for a vehicle to run errands or go to lunch over the noon hour.
- Establishing a guaranteed ride home program, to offset the need for a vehicle should an employee need to leave work during the day in the case of an emergency or should they need to work overtime.

All of these complementary measures are in most cases primarily the responsibility of an individual employer or a Transportation Management Association.

## Control of Truck Movements

Trucks can be major contributors to congestion and air pollution problems in urban areas, particularly during peak travel periods. Because of this, methods of controlling and directing truck movements are often explored as one means to address congestion and air quality problems. Such methods include techniques such as incident management programs, adjustments in sign placement, and variable message signs. In

addition, other techniques that have been explored but not implemented in other parts of the country include:

- Requirements that businesses do most of their shipping and receiving at night when there is generally excess capacity is available.
- Bans on truck travel on freeways during peak periods.

# **South Florida Commuter Services**

South Florida Commuter Services acts as a large Transportation Management Association, (TMA) for our region. Among the services provided by TMA's are:

- Vanpools;
- Ride matching;
- Coordination of alternative work schedules;
- Guaranteed Ride Home programs;
- Promotion and marketing of TDM strategies;
- Shuttle services between work sites and commercial areas.

South Florida Commuter Services (SFCS), is a regional commuter assistance program funded by the Florida Department of Transportation (FDOT) providing assistance to commuters and businesses in Miami-Dade, Broward and Palm Beach Counties. This program was established to increase the use of alternative modes of transportation by offering South Florida employers and their employee's alternatives to driving to work alone. SFCS provides free assistance to employers that would like to implement transportation solutions within their company. There are several TDM initiatives that are offered for organization by SFCS. It is important to note that TDM is most potent and flexible, given that local municipalities and the private sector are able to use resources as they see fit. The will or incentive to do so becomes integral to the success of each program. SFCS provides free assistance to employers in the tri-county area that would like to implement transportation solutions at their company. Programs offered include:

# Work Plan Needs Assessments & Program Development

SFCS Outreach Coordinators assist employers with conducting on-site analysis of the work-site and employee commuting habits and behaviors to establish tailored strategies to meet the needs of the employer and employees.

## **Carpooling Programs**

SFCS will create a Zip Code Analysis identifying clusters of possible carpools. The state ride matching software can match employees commuting patterns with those people who live and work near them and commute at the same time.

# **Vanpooling Programs**

A vanpool is a group of 5-15 individuals sharing the ride and commuting costs to get to work. SFCS can provide a fully insured van, offer employees a flexible month-to-month

lease, and provide a subsidy toward the operating expenses of the van, all at no cost to employers.

# **Emergency Ride Home (ERH)**

SFCS gives employees a "commuter insurance". Commuters who carpool, vanpool, bike, use transit, or walk get a free taxi ride in the event of an emergency or unscheduled overtime. Registered users receive up to six free taxi rides per year.

# **Employer Tax Benefits Assistance**

There are several ways an employer can save on taxes by offering employees benefits that encourage commuting to work by vanpooling or using transit. SFCS can provide employers with information on these programs and assistance in implementing them at the worksite.

# **Growth Management Tools**

In 2006 SB 360 becomes the most revolutionary planning tool, since the mid 1980's. The ramifications will be felt by every municipality in Miami Dade County, particularly those that use the various exceptions currently. Transportation Concurrency Exception Areas (TCEA), are widely used east of the Palmetto Expressway. SB 360 will have each are rejustified, and monitored, using a concurrency management system. This will evolve the TCEA. The intent of the TCEA is to exempt a selected area from transportation concurrency. Currently they are used over vast areas. The new legislation may lead to their use in a more prudent manner, particularly in confined areas around major transit, transportation or mixed use locations.

Transportation Concurrency Management Areas, (TCMA) allow for development to occur in justified area as long as mobility is maintained. These also allow for the use of an area wide level of service, which enables level of service to be aggregated over a series of parallel facilities, as opposed to on one specific link. This is a useful concept on a grid network. Many feel this is an excellent growth management tool. Person trip methodologies for measuring loss may also be used within the TCMA. Currently only eight TCMA's exist in the State. It is expected that many areas focused on infill, redevelopment or densification of mixed use areas will utilize this concept in the upcoming years.

## **Future Transportation System**

## **Existing, Planned and Programmed Improvements**

Miami Dade County has 10 projects programmed for Miami Gardens in its Transportation Improvement Program. Proposed funding for these are over one billion between 2005 and 2010. The bulk of this is approximately \$ 900 million of proposed

funds for the North Corridor. The other projects mainly focused on roadway resurfacing or general county-wide efforts that may impact the community.

The North Corridor is one of nine transit lines proposed in Miami Dade County, for which the ½ penny sales tax was approved by voters in 2001 as part of the Peoples Transportation Plan. The extent of this project is from the Dr.Martin Luther King, Jr. (MLK) MetroRail Station to the Miami-Dade/Broward County Line Station. The project is a MetoRail extension, being implemented by Miami Dade Transit. It is currently in the project development and environment (PD&E) phase and is to be funded in equal shares (+/-\$142 million FDOT / PTP) to match the +/-\$ 285 million which is being requested from the Federal Transit Administration (FTA). This project currently remains unfunded for construction by the FTA. This heavy rail transit line is to have approximately eight stops (four of which are in Miami Gardens) as it runs along NW 27 Avenue.



MetroRail North Corridor and the Golden Glades Intermodal Facility

SR 817/NW 27 Avenue is being resurfaced between NW 203 St and NW 215 St. This project that is being funded with approximately \$1.3 million through the Surface Transportation Program and being implemented by FDOT is in the Construction Incentive Phase. It should be completed by 2007.

SR 847 / NW 47 Avenue is being resurfaced between NW 183 St and NW 215 St. This project is being funded with approximately \$1.8 million through the State In-House Funds and being implemented by FDOT. It is currently in the Preliminary Engineering phase and is due to be completed by 2008.

SR-7 is being resurfaced between NW 159 St to just south of NW 177 St. This project is being funded with approximately \$90,000 through the Surface Transportation Program and being implemented by FDOT. It is currently in the Construction Incentive phase and is due to be completed in 2006.

Florida's Turnpike is being resurfaced from the extension of SR 826 to the Southbound off ramp. This project is being funded with approximately \$366,000 through the State Primary Funds and being implemented by FDOT. It is currently in the Construction Incentive phase and is due to be completed by 2008.

SR 817 / NW 27 Avenue is being resurfaced between SR 9 and NW 187 St. This project is being funded with approximately \$4.4 million through the State Transportation Program funds and being implemented by FDOT. It is currently in the Construction phase and is due to be completed by 2008.



# **Proposed Resurfacing Projects – Major Roadways**

There are several other projects that may affect Miami Gardens, but are more county-wide or regional in nature. These include a toll plaza at the Golden Glades Interchange as well as an Intelligent Transportation Systems (ITS) Manager, Regional Traveler Information and general countywide maintenance of the ITS system.

In Broward County there are three projects that are focused mainly in the SR 7 area.

SR-7 is due to have two lanes added and four lanes reconstructed between the county line and north of Hallandale Beach Boulevard, and is to be completed by the end of

2009. This project is funded with \$582 million from a variety of sources, and is being implemented by FDOT.

The Transit Bridge project, a transit route connection between the Golden Glades Interchange and I-595 is in the Preliminary Engineering phase, being implemented by Broward Transit. Funding for this study was set at \$750,000. This project; however, has received strong opposition in Miami Gardens mainly due to its proposal to exclude vehicles from one of the through lanes along SR-7/NW 2<sup>nd</sup> Avenue.



# **Proposed Transit Bridge Project**

There is another significant project being developed by FDOT district four called the SR-7 Rapid Bus. As the name implies, this would provide efficient and fast service along SR-7 (NW 2<sup>nd</sup> Ave in Miami Gardens) from West Palm Beach to the Golden Glades Interchange in Miami-Dade County. There are two bus stops planned within the City of Miami Gardens. One at NW 199<sup>th</sup> street and the other at Miami Gardens Drive.

The Miami Dade County Metropolitan Planning Organization's 2030 Long Range Transportation Plan includes six projects in Miami Gardens.

#### These include:

- 1. MetroRail North Corridor
- 2. Turnpike Improvements
- 3. Turnpike Interchange Improvement
- 4. NW 183<sup>rd</sup> Street Improvement
- 5. Palmetto Expressway, Alternative Use Lanes





Miami-Dade MPO's Long Range Transportation Plan (projects within Miami Gardens)

# PROPOSED TRANSPORTATION IMPROVEMENT PROJECTS FOR THE CITY OF MIAMI GARDENS

As part of the City of Miami Gardens Transportation Master Plan process several projects were identified that will contribute to not only improving the overall performance of the City's transportation system, but the region as well.

As noted by the data and analyses presented in this report, there are very few issues that the City of Miami Gardens is in sole control of. The City is influenced by issues that are regional in nature. Many of the issues that are faced are in the ultimate control of either Miami-Dade County or the Florida Department of Transportation (FDOT).

Several projects have been developed in three general broad categories, Physical Capacity, Alternative Modes, and Transportation Management. Some of these have been broken down further into sub categories such as transit, transportation planning, safety, roadway, and traffic operations/safety. Some projects are broad in nature, and have several specific efforts listed within them. Physical Capacity deal with capacity and physical improvements to the roadway, like traffic operations and safety. Alternative modes deal with walking, biking or transit. Transportation Management deals with methods of controlling the way and times that people travel, as well as growth management and concurrency issues in addition many planning and coordination issues relative to developing transportation policy. The following is a list of the projects in each category that make up the Project Bank. Each is described in detail in the following project sheets which discuss their purpose, need and cost, (planning, design, construction). These projects will be prioritized and ranked as part of the public involvement process.

# Proposed Project Bank (the list below does not reflect priorities)

Project	Туре
Support the North Corridor Project	Transit
<ol><li>Active Participation in State and Regional Projects</li></ol>	Transportation Planning
Greenways along Canal	Transportation Planning
4. ADA Compliant Sidewalks	Safety
<ol><li>Street Repaving Program, including markings and sign</li></ol>	s Roadway
6. Safe Routes to School	Traffic Operations and Safety
7. Participate in LRTP	Transportation Planning
8. Concurrency Management System	Transp Demand Management
Municipal Transit Circulator	Transit
10. Attain PTP Funding	Roadway
11. Transit Bus Routes Improvements	Transit.
<ol><li>Vehicular Access to Walmart from Neighborhood</li></ol>	Traffic Operations and Safety
<ol><li>South Florida Commuter Services Liaison</li></ol>	Transportation Planning
14. Maximize Roadway Intersection Capacity/Operations	Traffic Operations and Safety
<ol><li>Promote Infill Development @ Transit Stations</li></ol>	Transp Demand Management
16. Access Management	Traffic Operations and Safety
17. Coordinate with Surrounding Communities	Transportation Planning
<ol><li>Livable Communities on Major Corridors</li></ol>	Transportation Planning
19. Traffic Calming	Traffic Operations and Safety
20. Bus Shelters	Transit
21. Transportation Impact Fees	Transp Demand Management
22. Signal Progression Analysis	Traffic Operations and Safety
23. SR 826 Service Roads/Ramp Study	Traffic Operations and Safety
24. Park and Ride Feasibility Study	Transp Demand Management
25. Stadium Circulation Plan	Traffic Operations and Safety
26. Transit Marketing Plan	Transit
27. Parking at Bunche Park	Transp Demand Management
28. Traffic Flow at Lake Lucerne	Traffic Operations and Safety
29. LAP Certification	Roadway
30. Support FDOT SR 7 Fast Bus	Transit
31. City Wide Streetscape Plan	Roadway

Project Name: Support the North Corridor Project

**Project Category: Transit** 

#### **Purpose**

Support the North Corridor Transit project during the design and implementation of the MetroRail extension. Miami Dade Transit (MDT) will be having public meetings regarding final design of the rail plus the transit stations.

#### Need:

In order to assure that all critical components of the MetroRail extension serve the City and its residents in the best possible manner, the City officials, staff and the general public need to be effectively and continuously involved. This involvement needs to support and facilitate the implementation of this transit facility as it is vital to the future of the City and its residents.

#### **Description:**

City officials, staff, its consultants need to participate in all necessary meetings dealing with the final design of the rail, development and implementation of the transit stations, with particular attention to ensuring that they correlate with the City's future land use and transportation master plans. If necessary the City, when satisfied, formally support the project through a resolution. City officials, staff, its consultants and the public need to participate and get involved on all public meetings, work shops and hearing dealing with this project.

#### Cost:

Planning: Can be implemented through existing staff.

Project Name Active Participation in State and Regional Projects

**Project Category: Transportation Planning** 

# Purpose:

To ensure that all project activities affecting the City are properly coordinated with active participation by City officials, staff and its consultants.

#### Need:

The Florida Dept of Transportation districts four and six, Miami-Dade, Broward and West Palm Beach Metropolitan Planning Organizations as well as other county agencies and municipalities are involved in developing numerous transportation projects that affect the City of Miami Gardens. Many of these projects are regional in nature. It is vital that the City effectively participates and provides valuable input throughout their development and implementation. Furthermore, a Southeast Florida Regional Transportation Committee comprised of representatives from both FDOT districts, West Palm Beach, Broward and Miami-Dade MPOs has been formed. This committee will be working on regional issues, as well as developing a regional long range transportation plan (LRTP) and a five years transportation improvement program (TIP).

# **Description:**

City officials, staff, its consultants need to participate in all necessary meetings dealing with the development and implementation of all pertinent transportation projects, such as the FDOT district four rapid bus and the above mentioned regional LRTPs and TIPs, with particular attention to ensuring that they correlate with the City's future land use and transportation master plans. City officials, staff, its consultants and the public need to participate and get involved on all public meetings, work shops and hearings dealing with project development.

#### Cost:

Planning: Can be implemented through existing staff.

Project Name: Greenways along Canal ROW Project Category: Transportation Planning

## Purpose:

To support existing activities dealing with the development and implementation of pedestrian and bicycle related projects, as well as developing and implementing additional projects along canal ROW in coordination with existing plans.

#### Need:

Many of the City's major corridors are either currently congested or will be in the future. Alternative means of transportation to the single occupant automobile need to be identified and implemented as appropriate. Providing effective and safe bicycle and pedestrian facilities is one important component. Furthermore well planned and implemented bicycle and pedestrian facilities will provide for a higher quality of life.

## **Description:**

Actively participate with State and County agencies in the development and implementation of pedestrian and bicycle facilities such as the Snake Creek and perform study to identify potential new facilities. The City will be applying for grants through regional, state, and federal agencies for a city-wide canals greenway/bikeways feasibility studies and implementation plans.

#### Cost:

Planning: \$40,000 Design: TBD Construction TBD:

**Project Name:** ADA Compliant Sidewalks

**Project Category: Safety** 

#### Purpose:

Evaluate all sidewalks for their compliance with Americans with Disabilities Act (ADA) standards. Bring non compliant facilities into compliance.

#### Need:

Safety in transportation is paramount to the welfare of the citizens. One very important component is providing for safe and effective pedestrian facilities such as sidewalks. Having sidewalks makes it easier to walk from one place to another. Physically challenged persons cannot utilize these facilities without well designed ramps. This is accepted by the Peoples Transportation Plan as a way to spend transit dollars.

## **Description:**

The City is currently performing an inventory and evaluation of all local City streets and has already identified many locations for sidewalk repairs as well as constructing new ones. \$ 75,000 per year has been identified to carry out these improvements. Next step will be to evaluate all of the existing sidewalks on major arterials within the City for ADA compliance, as well as for repairs and constructing new sidewalks. One of the main objectives is to design and construct compliant facilities at all noncompliant or non existent locations, particularly those on the same blocks as transit stops

#### Cost:

Planning \$ 30,000

Design \$ 6.00/ Lft

Construction \$ 60.00/ Lft

Project Name: Street Repaying Program

**Project Category: Roadway** 

#### Purpose:

Evaluate each street in the City and determine their pavement condition. Begin repaving all streets over a period of 5 years, starting with those that are ranked highest.

#### Need:

New pavement and striping on roadways would provide a neat and clean appearance, as well as providing for a smooth, comfortable and safe ride for motorists with the obvious benefits.

# **Description:**

The City is currently performing an inventory and evaluation of all local City streets and has already identified many locations for repairs and resurfacing. Some of these local roads are either undergoing or have been already resurfaced. In fact, approximately \$ 1.4 million has been identified to carry out this program. Next step will be to undertake a street by street evaluation of pavement conditions along major arterials. Several major roadways have been initially identified as in need of resurfacing. They are:

NW  $2^{nd}$  Ave (within most of the City) – by FDOT NW  $47^{th}$  Ave (183 St -215 St) – by FDOT NW  $27^{th}$  Ave (within most of the City) – by FDOT NW  $7^{th}$  Ave (159 St -177 St) – by FDOT NW  $7^{th}$  Ave (7 Ave Ext -202 St) NW  $22^{nd}$  Ave (151 St -196 Terr) NW  $47^{th}$  Ave (156 St -167 St) NW  $215^{th}$  St (27 Ave -37 Ave) NW  $207^{th}$  St (NE 2 Ave - E. of TPK) NW  $215^{th}$  St (NE 2 Ave - NW 17 Ave)

NW 191<sup>st</sup> St (27 Ave – 47 Ave) NW 160 St/Bunche Pk Dr (17 Ave-27 Ave) NW 155<sup>th</sup> St (12 Ave – 47 Ave) NW 155<sup>th</sup> St (22 Ave – 27 Ave)

#### Cost:

Planning \$ 15,000

Design 10 % of Construction costs Construction \$ 15.00 per Lft per lane

Project Name: Safe Routes to School

**Project Category: Traffic Operations and Safety** 

#### **Purpose:**

Miami-Dade Public Works Department (MDPW) has a Safe Routes to School program that focuses on sidewalk connections to elementary and middle schools. The MPO has a pilot program for Safe Routes to Schools, which is currently in progress. The intent is to identify safety hazards for student pedestrians and target high crash areas with enforcement, education and identify improvements.

#### Need:

Vehicular traffic around schools is intense. Vehicular intrusion due to this is not only an annoyance to neighbors, but a serious safety concern for school children. This project would increase safety for student pedestrians.

#### **Description:**

The City should coordinate with the Miami-Dade Public Schools and Miami-Dade Public Works (MDPW) to encourage participation, and to initiate the Safe Routes to School program at the target sites. Needed is a safety survey of issues within a two mile radius of each school. Identify and prioritize improvements to help correct these hazards. Implement an educational safety program at each school. The City is currently working on various projects such as the FDOT's Transportation Enhancement program, the CTST program and Walk Safe program with the Trauma Center.

#### Cost:

Planning \$15,000 per school

Design TBD Construction TBD

Project Name: Participate In MPO's Long Range Transportation Planning (LRTP)

**Process** 

**Project Category: Transportation Planning** 

# Purpose:

Be actively involved in MPO's Long Range Transportation Plan (LRTP), Public Involvement process. Work with MPO to assess needs of the community and have projects relative to this plan, put on the Long Range Transportation Plan that will benefit the City and its community.

#### Need:

The LRTP is the county's transportation planning effort. It has programmed projects out 25 years into the future. These projects eventually move to the 5-Year Transportation Improvement Program and to construction. The extension of MetroRail North Corridor is a major transportation project in the current LRTP and programmed for construction. Greater participation in the planning effort would increase the opportunity for the implementation of projects in Miami Gardens that have regional as well as local significance and benefits.

## **Description:**

The Miami Gardens Transportation Master Plan should serve as the public input for the next update of the MPO's LRTP. City officials, staff and its consultants need to participate in all necessary meetings dealing with the development and implementation of the LRTP, with particular attention to ensuring that they correlate with the City's future land use and transportation master plans. City officials, staff, its consultants and the public need to participate and get involved on all public meetings, work shops and hearings dealing with project development.

Cost: Planning Through existing staff

Project Name: Concurrency Management System
Project Category: Transportation Demand Management

# Purpose:

The purpose is to develop a method by which land development is tracked in the City of Miami Gardens, keeping track of remaining capacities in all concurrency categories, so as to ease the development approval process, and maintain the ability to develop. This will insure compliance with the new growth management requirements of SB 360.

#### Need:

In order to effectively meet state and local requirements with regards to Concurrency, a well designed, effective and easy to implement Concurrency Management System need to be in place. Otherwise, adequate tracking of land development and available capacities may not be effectively achieved, thus running the risk of exceeding concurrency with the result of limiting redevelopment in the City, and therefore, its competitive edge.

# **Description:**

The project would entail the development of an automated windows based computer program that would track capacities, and subtract demand to keep a running total of the availability of capacities, and hence the ability to develop. This program should have the ability for the developers or planners to examine information on remaining capacities, and the ability to reserve capacities as they enter the development queue. The program should be uncomplicated to use and easily updated on a regular basis.

#### Cost:

Planning: \$ 90,000 Design: na Implementation na:

Project Name: Municipal Transit Circulator

**Project Category: Transit** 

#### Purpose:

The purpose of this would be to study the need for an intra City circulator to complement existing MDT transit services. To Improve and provide transit to and from the Golden Glades Multimodal Center including access to/from the Palmetto Expressway corridor.

#### Need:

There are many transit demands within the City, and possibly a need for a reliable, effective and cost efficient transit circulator. Service to major traffic generators, schools and terminal facilities for local residents has been requested. One of the many issues facing the City's residents is the lack of adequate transit service to the Golden Glades Intermodal facility and its parking lot as well as many of the businesses and industries south of the Palmetto Xwy.

## **Description:**

This detailed study would examine potential circulator transit by examining the existing service, the population demographics, income and transit dependency, as well as potential user groups. Also the scope would look at potential transit generators. It would recommend potential transit routes, and implementation procedures, relative to cost of operations and maintenance. Comparisons of the use of different operations, (City, MDT or private operators) will be provided. Information relative to the development of an interlocal agreement with MDT as well as potential RFP's soliciting operators can be provided.

#### Cost:

Planning: \$50,000 Design: na

Implementation: Bus purchase approx. \$ 70,000 each plus \$ 100,000 -

200,000/year in maintenance costs.

Project Name: Attain Peoples Transportation Plan (PTP) Funds

**Project Category:** Roadway

# Purpose:

The purpose of this project is to enhance the City's ability to plan, design and construct roadway and transit projects by attaining additional funding for them.

#### Need:

Miami Gardens, having incorporated after November of 2002, may not be eligible to receive funds allocated as part of the Peoples Transportation Plan (PTP). Twenty percent of funds collected as part of this ½ penny sales tax goes to the municipalities, and is distributed in a prorate share based on population. Miami Gardens would be eligible for approximately \$ 3 million per year in funding. As of this date the City has not received this dedicated source of funding for transportation projects.

## **Description:**

Work with the Miami-Dade County Board of County Commissioners to have City of Miami Gardens' share of this PTP funding approved.

Potential Funding per year: Exact Amount TBD

Project Name: Transit Bus Routes Improvements

**Project Category: Transit** 

# Purpose:

Numerous complaints have been received regarding transit service improvements in many areas within the City. Many of the complaints centered on bus service frequencies and coverage. This project should examine these complaints and evaluate improvements.

#### Need:

In order to encourage more shifts from the automobile to transit, transit needs to provide adequate and comprehensive service. Only then would there be incentives for persons to make the modal shift. Transit improvements are also essential to better cover the needs of the transit dependent population.

#### **Description:**

Working in conjunction with M-Dade Transit (MDT) agency, and Broward County Transit, perform required inventories and analyses to determine those areas in need of improvements. Special attention would be paid to bus service frequency and area coverage. Capital equipment and operation/maintenance costs are a very important component of this effort. Some existing MDT bus routes, with substantial rider ship, have been initially identified for potential improvements in headways/service frequency. They are routes: # 2, # 17, # 27 & # 32. Furthermore, the analyses need to look at the feasibility of providing effective and reliable transit circulator and/or feeder bus to the Golden Glades and other major trip attractors within the City.

#### Cost:

Planning: \$30,000 Design: TBD Implementation: TBD

Project Name: Pedestrian and Vehicular Access to Walmart by the Stadium

**Project Category: Traffic Operations and Safety** 

# Purpose:

Ensure the safe and efficient movement of pedestrian and vehicular traffic within the area.

#### Need:

The proposed Walmart development, at this part of the City, is a major one. It will generate significant amount of vehicular traffic and a significant increase of pedestrian traffic within this area. Therefore, measures and projects need to be developed and implemented in conjunction with the developer, to ensure safe and efficient roadway and pedestrian facilities.

## **Description:**

Coordination will be maintained with the developer, city staff and local residents to address issues and deficiencies on existing roadway, pedestrian and other related transportation facilities. A comprehensive look will be taken at identifying additional improvements to the transportation network.

#### Cost:

Planning: \$ 10,000 Design: TBD Construction: TBD

Project Name: South Fla Commuter Services (SFCS) Liaison

**Project Category: Transportation Demand Management** 

# Purpose:

The purpose of this project is to utilize alternative means to move people, particularly the TDM strategies offered by South Florida Commuter Services.

#### Need:

Many of the City's major arterials are already operating at undesirable level-of-services (LOS), and many more will be operating at undesirable LOS according to the years 2015 and 2030 projections. Therefore, alternatives to the single occupant automobile must be considered and implemented. Among these alternatives are the programs and options offered by the SFCS, such as ride-sharing/car pooling, among many others.

#### **Description:**

This would essentially utilize the services offered by the South Florida Commuter Services, by encouraging businesses and employees to take advantages of the programs. The City should consider providing incentives to use these services, and assisting SFCS by helping they gain access to major employers in the City. A transportation liaison would be key in facilitation their implementation.

#### Cost:

Planning: Can be facilitated by existing staff.

Project Name: Maximize Roadway Intersection Capacity and Operations where

**Appropriate** 

**Project Category: Traffic Operations and Safety** 

#### Purpose:

To improve pedestrian and vehicular traffic operations, capacity and safety at key intersections throughout the City.

#### Need:

There have been numerous issues raised by City officials, staff and citizens with regards to concerns at several intersections. These range from excessive congestion and delays, pedestrian safety to the overall operations of the intersections.

Many of these issues and concerns have been verified by the City's consultant. Approximately twenty intersections have been identified. **Please refer to the Table attached herein.** 

# **Description:**

Collect relevant pedestrian, crash history, signal and vehicular traffic data; perform required traffic capacity/operational analyses as well as field observations. Develop improvement recommendations that are cost effective and can be implemented within relatively short time frame. Longer term more costly improvement recommendations may be also developed.

#### **Initial Recommendations:**

- <u>NW 27<sup>th</sup> Avenue and 175<sup>th</sup> Street</u>. Provision of a protected/permissive SB LT signal phase appears justified. There appears to be room to construct a WB exclusive RT lane. EB approach needs pavement repair/resurfacing. Detailed data collection and analyses recommended.
- NW 27<sup>th</sup> Avenue and 170<sup>th</sup> Terr. There are violations of the current "Right Turn Only" at the WB approach. Recommend median on 27<sup>th</sup> Avenue be modified to prevent LTs from the WB approach. This would be achieved by reconstructing the existing median opening with add'l concrete.
- <u>NW 2<sup>nd</sup> Avenue and 215<sup>th</sup> Street</u>. SB approach RT radius reflects much wear and tear, needs repair. SB exclusive LT lane storage length could be increased. There appears to be room to provide for an exclusive RT lane on the WB approach. Detailed data collection and analyses recommended.
- <u>NW 2<sup>nd</sup> Avenue and 207 Street</u>. WB approach needs pavement markings. Room to extend NB exclusive LT lane. Detailed data collection and analyses recommended.
- NE 2<sup>nd</sup> Avenue and 215 Street. wear and tear, specially the turning radii. Need repair.
- N. Miami Avenue and 191 Street. Wear and tear, most of the turning radii. Need repair.
- <u>NW 12<sup>th</sup> Avenue and 191 Street</u>. Single lane EB and WB approaches would benefit from widening to provide LT lanes. Detailed data collection and analyses recommended.
- <u>NW 32<sup>nd</sup> Avenue and 159 Street</u>. Single lane on all approaches. Would benefit if exclusive LT lanes are provided. Detailed data collection and analyses recommended.
- <u>NW 32<sup>nd</sup> Avenue and 175 Street</u>. Single lane on all approaches. Would benefit if exclusive LT lanes are provided. Detailed data collection and analyses recommended.
- <u>NW 47<sup>th</sup> Avenue and 191 Street</u>. Heavy wear and tear at SE corner. Single lane on all approaches. Would benefit if exclusive LT lanes are provided. Detailed data collection and analyses recommended.

#### Cost:

Planning: \$1,200 per intersection Design: TBD Construction: TBD

# **Proposed Intersection and Arterial Improvements**



# TRANSPORTATION ELEMENT DATA, INVENTORY & ANALYSIS

## MIAMI GARDENS TRANSPORTATION MASTER PLAN

# Candidate Intersections / Roadway Links for Operational Studies

Intersection	Issue / Concern	Requested by	Remarks	Jurisdiction
NW 27th Ave / 175th St	Need protected LT arrow NB & SB 27th Ave	Council member	Perform detailed capacity/oper analysis	FDOT
NW 27th Ave / 170th Terr	Many veh disregarding the LT prohibition on WB 170th Terr	Council member	Confirmed by field observations. Request FDOT to address. Offer solutions	FDOT
NW 27th Ave / 199 St	Congestion / operations	Council member	Perform detailed capacity/oper analysis	FDOT
NW 27th Ave / 207 St	Congestion / operations -long delays for residents on 207 St	Council member/citizens	Perform detailed capacity/oper analysis	FDOT
NW 27th Ave / 215 St	Operations - SB LT - congested, veh going past intersection & making U-turns	Citizen	Perform detailed capacity/oper analysis	FDOT
NW 12th Ave / M Gardens Dr	Congestion / operations	Council member	Perform detailed capacity/oper analysis	City
NW 12th Ave / 191 St	Congestion / operations	Council member	Perform detailed capacity/oper analysis	City
NW 12th Ave / 199 St	Congestion / operations	Council member	Perform detailed capacity/oper analysis	City
SR 826 Service Rd / 27 Ave	Veh accident prone / confusing signage	Council member	Request FDOT to address. Offer solutions	FDOT
SR 826 Service Rd / Ramps 17 ave to 57 Ave	Inconsistencies between stop and yield signs application and weaving conflicts	Council member/citizens	Request FDOT to address. Offer solutions	FDOT
NW 17th Ave / 183rd St	operational concerns w/existing signal placement in SB direction, school xing	Council member	Request FDOT to address. Offer solutions	FDOT
NW 32nd Ave / 159 St	Operations	TCG	Perform detailed capacity/oper analysis	County
NW 32nd Ave / 175 ST	Operations	TCG	Perform detailed capacity/oper analysis	County
NW 47th Ave / 191 St	Operations	TCG	Perform detailed capacity/oper analysis	FDOT
NW 2nd Ave / 207 St	Need protected LT arrow SB on 2nd Ave	Citizen	Perform detailed capacity/oper analysis	FDOT
NW 2nd Ave / 215 St	Congestion / operations	TCG	Perform detailed capacity/oper analysis	FDOT
NW 2nd Ave / 191 St	Operations	TCG	Perform detailed capacity/oper analysis	FDOT
NE 2nd Ave / 215 St	Operations	TCG	Perform detailed capacity/oper analysis	City
N Miami Ave / 191 St	Operations	TCG	Perform detailed capacity/oper analysis	City
NW 37th Ave / 207 St	Operations	TCG	Perform detailed capacity/oper analysis	County
NW 37th Ave / 199 St	Operations	TCG	Perform detailed capacity/oper analysis	County
NW 37th Ave / 191 St	Operations	TCG	Perform detailed capacity/oper analysis	County
NW 37th Ave / 175 St	Operations	TCG	Perform detailed capacity/oper analysis	County
Miami Gardens Dr	Delays, poor signal progression	Council member/citizens	Request M-D Public Works to address or do signal progression study on arterial	FDOT
NW 2nd Ave/US 441	Delays, poor signal progression	Council member/citizens	Request M-D Public Works to address or do signal progression study on arterial	FDOT

## **MIAMI GARDENS TRANSPORTATION MASTER PLAN**

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Candidate Intersections / Roadway Links for Operational Studies

Intersection	Issue / Concern	Requested by	Remarks	Jurisdiction
			Request M-D Public Works to	
		Council	address or do signal	
NW 27th Ave	Delays, poor signal progression	member/citizens	progression study on arterial	FDOT
			Request MD Public Works to	
		Council	address. Offer potential	
NW 12th Ave	speeding /safety school xing	member/citizens	solutions	City
		Council		
NE 2nd Ave	Traffic intrusion/ speeding / safety	member/citizens	Perform traffic calming study.	City
		Council		
N Miami Ave	Traffic intrusion/ speeding / safety	member/citizens	Perform traffic calming study.	City
		Council		
NW 207th St	Traffic intrusion/ speeding / safety	member/citizens	Perform traffic calming study.	City
		Council		
NW 175th St	Traffic intrusion/ speeding / safety	member/citizens	Perform traffic calming study.	County

Project Name: Promote Infill Development at Transit Stations through TCMA or TCEA

Concepts

**Project Category: Transportation Demand Management** 

#### Purpose:

To encourage transit oriented development at MetroRail and other Modal stations.

#### Need:

One of the many factors that make transit usage successful is to have the ability to attract substantial amount of trips and to shift them from the single occupant automobile to public transportation. When a substantial modal shift occurs, roadway levels-of-service are improved with the obvious benefits in reducing delays, travel time and the costs associated with it.

## **Description:**

Assure that land development around transit stations is coordinated with the policies developed by the City. Research local and state laws and regulations that pertain to Concurrency rules. Determine how these laws and regulations can be best applied to the City of Miami Gardens to continue to develop as appropriate. Emphasis should be placed on transit oriented development around transit corridors, including transit stations, as well as other major corridors with intense business development.

#### Cost:

Planning: \$ 50,000 Design: TBD Implementation: TBD

Project Name: Access Management

**Project Category: Traffic Operations and Safety** 

#### Purpose:

The purpose of this project is to improve the flow of traffic by examining effective access management techniques were possible on the major roadways in the City, as well as improving vehicular and pedestrian safety.

#### Need:

Uncontrolled access with many driveways and roadway connections along major arterials present significant operational and safety concerns, not only to vehicular traffic, but to pedestrians as well. These are normally areas with intense business development with very high numbers of driveways and side street connections, as well as high number of roadway median openings. This situation is faced by many locations throughout the City, with examples such as along SR-7/NW 2<sup>nd</sup> Avenue, NW 27<sup>th</sup> Avenue, among others. In essence, there is a strong need to develop criteria and plans to adequately address and mitigate current deficiencies as well as ensure an efficient and safe future roadway network.

# **Description:**

Working in conjunction with planners and designers regarding an inventory of roadway conditions on each of the major through streets should be performed. This inventory should include areas and intersections of poor level of service, high accidents and areas receiving high complaints. Driveway counts may need to be performed to formally examine the extent of the problems. FDOT access management manual will be consulted throughout the study. Recommendations will be made to improve access and address operational and safety deficiencies, as well as developing criteria to ensure an efficient and fair access management system.

#### Cost:

Planning: \$50,000 per corridor

Design: TBD Construction: TBD

**Project Name:** Coordinate with Surrounding Communities

**Project Category: Transportation Planning** 

# Purpose:

To coordinate and manage transportation and land use issues between Miami Gardens and its adjoining neighbors. This will open effective lines of communications between those most affected by these impacts.

#### Need:

Transportation and land use issues are regional, as such, those made in Miami Gardens affect its neighbors and vice versa. As enabled by the new Transportation/Growth Management legislation (SB 360), this higher level of coordination shall ease implementation and effectiveness of many projects.

## **Description:**

This would develop a process by which land use and transportation policies and projects are effectively coordinated with adjacent cities, the County, MPO and the State.

#### Cost:

Planning: \$10,000 – 60,000 per year, depending on formalized description of services.

Project Name: Livable Communities on Major Corridors

**Project Category: Transportation Planning** 

#### Purpose:

The purpose of this project is to utilize the road to its holistic potential as an integral part of the mobility system and the community. Pedestrian connections can be used as a transportation alternative with adequate and attractive enhancements. In addition this can assist in beautifying the roadway network and creating character in Miami Gardens.

#### Need:

As the roadways become ever more congested, and vehicular trips take longer, more people will be searching for alternative means of travel. The most basic is traveling on foot. The opportunity to do this is most prevalent during the midday peak hours when many people opt to walk to lunch or midday errands at the various nearby commercial areas. Pedestrian crossing at many of Miami Gardens' automobile oriented streets is uncomfortable and potentially hazardous. The City has received a grant from FDOT to initiate a US 441/SR 7/NW 2<sup>nd</sup> Avenue Livable Communities study as well as a Master Plan for the SR 7 corridor.

New studies/projects are recommended on

- NW 27<sup>th</sup> Ave, from151<sup>st</sup> Street to County line
- 183<sup>rd</sup> Street, from SR-7 to 47<sup>th</sup> Avenue
- Palmetto Expressway
- And other major corridors to be identified.

## **Description:**

In addition to the above grants, work with FDOT's Planning Department to see if the Livable Communities initiatives can be implemented on other major transportation thoroughfares. Recommendations may include enhanced pedestrian crossings, striping, and count down pedestrian lights, special phasing during periods of high pedestrian use, mid block crossings, bicycle lanes, bus pull out bays, enhanced transit stops, wider sidewalks, and enhanced landscaping.

#### Cost:

Planning: \$20,000 per roadway

Design: TBD Construction: TBD

Project Name: Traffic Calming

**Project Category: Traffic Operations and Safety** 

#### Purpose:

Traffic calming is intended to address and mitigate the negative effects of neighborhood intrusion; speeding and pedestrian safety posed by vehicles using local streets to avoid congestion on major arterials.

#### Need:

City officials and the public have expressed concerns with unsafe conditions on some roadways throughout the City due to traffic intrusion and speeding. Roadways identified thus far include NE 2<sup>nd</sup> Ave, North Miami Ave, NW 12<sup>th</sup> Ave, NW 207<sup>th</sup> St, and NW 175<sup>th</sup> St.

## **Description:**

Vehicular, pedestrian, and crash data will be collected as well as performing the required engineering analyses. Current standards and application of traffic calming alternatives will be consulted and mitigation measures and projects will be developed and recommended for implementation.

#### Cost:

Planning: \$30,000 Design: TBD Construction: TBD

Project Name: Bus Shelters Project Category: Transit

### Purpose:

Provide protection from the sun, rain, wind and a place to sit down and rest for the elderly and young children and more readily identify transit stops.

#### Need:

Lack of sufficient bus shelters is a disincentive for people to shift from their automobile and to use public transit. It is also an important necessity for folks who are dependent on transit, especially for the elderly and children, as well as making it more pleasant for everyone that has to wait for the bus.

# **Description:**

Perform an inventory of existing bus shelters throughout the City. Determine their adequacy to provide protection against inclement weather and availability of seats.

Determine potential locations where new bus shelters could be installed and determine cost estimates. Need to work closely with Miami-Dade Transit.

### Cost:

Planning: \$ 10,000 Design: TBD Construction: TBD

Project Name: Transportation Impact Fees

**Project Category: Transportation Demand Management** 

# Purpose:

The purpose of this project is to develop a method of charging impact fees to the development community, so that various transportation projects can be planned, designed and constructed to enhance mobility in the City. This should be done in concert with provisions of SB 360, which will change the structure by which this can be done.

#### Need:

As development increases and continues to impact the transportation system in the city, various transportation projects designed to alleviate congestion, such as those recommended in this master plan, will need to be built. The process for attaining funds for transportation projects is highly competitive, and local funds always enhance the city's ability to move projects forward in an expedited manner.

## **Description:**

The City should examine their ability to utilize impact fees from developments to raise funds for transportation projects. Next step would be for the City to develop policies and regulations to obtain impact fees in a fair and equitable manner.

### Cost:

Planning: \$50,000

**Project Name:** Traffic Signal Progression Analysis

**Project Category: Traffic Operations** 

### Purpose:

To ensure that traffic signals along an arterial road are effectively synchronized to allow for the efficient flow of vehicles within the arterial with minimum number of stops; and being able to travel at the posted speed limits with reduced delays along the way during peak travel times while ensuring adequate pedestrian signal timing and phasing.

#### Need:

It has been said that many of the major arterials within the City of Miami Gardens do not provide for efficient traffic signal synchronization. Average vehicular delays are high due to numerous stops along the travel path by encountering the red signal indication, as well as overall delays and lost of time due to poor signal progression speeds. Resulting in many vehicles forced to travel at speeds below the posted speed limit. City officials have identified three arterials in need of efficient traffic signal synchronization. They are Miami Gardens Dr, SR-7/NW 2<sup>nd</sup> Avenue and NW 27<sup>th</sup> Avenue. It should be understood that ideal or even desired traffic signal synchronization may not be possible at times due to many factors such as physical distribution and arrangement of the local roadway network, balancing the needs between heavy traffic flows in both the east-west and north-south directions, as well as other factors.

# **Description:**

Collect required traffic and signal data, perform detailed traffic engineering analyses and determine the best possible traffic signal synchronization. Initial effort will be on the three arterials identified above. Field observations are recommended to determine other potential arterials for study. Account for peak pedestrian flows from schools.

### Cost:

Planning: \$10,000 per arterial

Design: TBD Construction: TBD

Project Name: 826 Service Roads / Ramp Study Project Category: Traffic Operations and Safety

### Purpose:

To provide safe and efficient vehicular operations between the Palmetto Expressway ramps, the services roads running parallel to the freeway and the intersections they affect.

#### Need:

City officials and citizens have raised concerns with unsafe and confusing conditions at several locations between the interchanges of 12<sup>th</sup> avenue and 57<sup>th</sup> avenue. The concerns deal with conflicts between vehicles on the exit ramp with those on the service roads, as well as confusing signs and lack of adequate signage among other concerns.

# **Description:**

As part of the Transportation Master Plan, field reviews have been made and preliminary solutions identified to address the concerns. These will be transmitted to the FDOT for their consideration subject to further more detailed engineering studies.

The additional detailed studies could either be performed by FDOT or by the TMP consultant.

### **Initial Recommendations:**

- Support FDOT study recommendations at the 27<sup>th</sup>, 57<sup>th</sup> & 67<sup>th</sup> Interchanges. In summary they entail construction of an additional WB lane on the service road between 57<sup>th</sup> and 67<sup>th</sup> interchanges; add an additional lane to the SR 826 WB exit ramps to 57<sup>th</sup> and 67<sup>th</sup> Avenues; and widening the EB approach to 27<sup>th</sup> and the WB approach to 57<sup>th</sup> Avenues.
- Existing lane arrangement of the EB service road at 57<sup>th</sup> Avenue should be revised to reflect two exclusive LT lanes, one Thru-only lane and one shared Thru-Right T lane. Detailed traffic data collection and analyses recommended.
- WB service road at 47<sup>th</sup> Avenue presents weaving concerns between exiting WB ramps vehicles with those on the frontage road. Explore possibility of one additional lane at the exit ramp and/or the service road. Detailed traffic data collection and analyses recommended.
- WB service road at 27<sup>th</sup> Avenue, recommended replacing Yield sign with a Stop sign. Weaving distance is short with relatively high weaving volumes.

### Cost:

Planning: \$ 20,000
Design: TBD
Construction: TBD

Project Name: Park and Ride Feasibility Study
Project Category: Transportation Demand Management

# Purpose:

The purpose of this study is to formally identify the need, feasibility and location of park and ride lots within the City of Miami Gardens.

### Need:

Utilization of Park and Ride lots may help alleviate traffic congestion in Miami Gardens by intercepting vehicle trips at the City's perimeter, or at other locations, and distributing people via transit to their destinations. This can be coupled with the MetroRail extension, the proposed municipal circulator, or various other transit opportunities.

# **Description:**

This study should identify potential park and ride locations by examining areas of high vehicular access, areas of heavy transit usage, areas of mixed use, the potential for transit usage along major corridors, the potential modes of transit to service such facilities, the cost of property acquisition, potential rider ship and the implementation time frame.

### Cost:

Planning: \$ 90,000 Design: TBD Construction: TBD

Project Name: Stadium Circulation Plan
Project Category: Traffic Operations and Safety

### Purpose:

To improve vehicular and pedestrian access and circulation to the stadium during major events.

#### Need

City officials and the public have complained with regards to long vehicular delays to access the stadium and to surrounding communities during major events. The safety of pedestrians is also a significant concern.

# **Description:**

Conduct inventory and field observations to ascertain vehicular and pedestrian operations during the most heavily used time periods. Perform required engineering analyses and develop improvement recommendations, both short and longer term. Particular emphasis will be paid to traffic signal and access management operations.

### Cost:

Planning: \$ 15,000 Design: TBD Construction: TBD

Project Name: Transit Marketing Plan

**Project Category: Transit** 

# Purpose:

To facilitate public awareness of available transit information such as bus routes, scheduling, area coverage, locations of park-n-ride lots, etc.

### Need:

Many citizens have complained with regards to lack of adequate information about available transit options and how it can best serve their needs.

# **Description:**

Working in conjunction with Miami-Dade Transit, look into different potential marketing alternatives to address the above concerns. Develop a feasible cost effective marketing plan, which will also include extensive public awareness and outreach.

### Cost:

Planning: \$ 10,000 Design: TBD Implementation: TBD

Project Name: Parking at Bunche Park

**Project Category: Transportation Demand Management** 

### Purpose:

Develop alternatives to address the parking shortage within the area of Bunche Park.

#### Need:

City officials and the public have complained about inadequate parking in this area, forcing them to park in other nearby locations. This situation is even worse around the school. This presents obvious concerns with regard to not only pedestrian safety, but vehicular as well.

# **Description:**

Conduct inventory and field observations to ascertain availability of parking and observe vehicular and pedestrian operations during the most heavily used time periods. Perform required engineering analyses and develop improvement recommendations, both short and longer term.

### Cost:

Planning: \$ 10,000 Design: TBD Construction: TBD

Project Name: Traffic Flow at Lake Lucerne Project Category: Traffic Operations and Safety

# Purpose:

To alleviate traffic delays for residents exiting to NW 27<sup>th</sup> Avenue and address safety concerns such as speeding.

# Need:

City officials and residents of the area have complained about very long delays being experienced by vehicles trying to exit area onto NW 27<sup>th</sup> Avenue. The issue is compounded by the fact that there is only one access point, and it is through NW 27<sup>th</sup> Avenue. Furthermore there may not be practical and/or cost feasible options due to the many physical or private property related limitations. City officials and residents have also raised concerns regarding vehicular speeding along 207<sup>th</sup> Street.

# **Description:**

Collect traffic and signal data, conduct field observations and perform required engineering analyses to address the concerns. Develop improvement recommendations covering short term low cost as well as longer term more costly options.

### Cost:

Planning: \$7,000 Design: TBD Construction: TBD

Project Name: Apply for Local Agency Program (LAP) Certification

**Project Category: Roadway** 

### Purpose:

Take advantage of the opportunity to self-administer transportation projects by receiving federal funds via a reimbursement process granted by FDOT through the Local Agency Program.

#### Need:

The nature of the roadway network in Miami Gardens leaves the City with little control over its fate. There are few local roads. The vast majority of roads are under the control of other entities, particularly Miami Dade Public Works (MDCPW) and FDOT. The City needs to have excellent working relationships and partner with these entities in order to have its voice heard regarding future planning and implementation along these facilities.

## **Description:**

The City has already submitted an application to FDOT to become LAP certified. The program allows FDOT to forge contractual relationships with local governmental agencies that have the authority to plan, develop, design, acquire right-of-way, and construct transportation facilities. Local agencies must be LAP-certified before entering into a LAP Agreement. FDOT is responsible for ensuring the certified Local Agencies comply with all applicable Federal Statutes, rules and regulations. Local Agencies are reimbursed with Federal funds administered by the Federal Highway Administration (FHWA).

The Local Agency Program (LAP) is administered in each District by a District LAP Administrator designated by the District Secretary. The District LAP Administrator consults and advises the Local Agency on project management procedures to be followed. The level of assistance provided is based on the nature of each project and the demonstrated capabilities of the Local Agency. In addition, the District Administrator annually selects certain projects for a Process Review. Project-level direction and oversight are provided through the District Offices of Planning, Environmental Management, Design, Right-of-Way, Policy Planning, Environmental Management, Federal-Aid, Design, Contracts Administration, Equal Opportunity, Comptroller, and Program Development. The Central Office LAP Administrator chairs the standing committee on standards and practices for local agencies. At this time, District Six does not grant LAP certification for right-of-way projects.

#### Cost:

Planning: \$ 10,000 Implementation: TBD

Project Name: Support FDOT SR 7 Fast Bus

**Project Category: Transit** 

# **Purpose**

Support the FDOT Fast Bus project during its final development and implementation. This would be an express bus route with peak-period 15-minutes service headways and limited number of stops. Would provide service along SR 7 from FAU campus on Glades Road in West Palm, all the way down to the Golden Glades Tri-Rail park and ride lot in Miami- Dade County. Two stops are currently planned within the City of Miami Gardens at 199<sup>th</sup> Street, and Miami Gardens Drive.

#### Need:

In order to assure that all critical components of this project serve the City and its residents in the best possible manner, the City officials, staff and the general public need to be effectively and continuously involved. This involvement needs to support and facilitate the implementation of this project as it is very important to the future of the City and its residents.

# **Description:**

City officials, staff, its consultants need to participate in all necessary meetings dealing with the final development and implementation of this fast bus project. If necessary, the City, when satisfied, formally supports the project through a resolution.

### Cost:

Planning: FDOT Design: FDOT

Implementation FDOT/Broward Transit

**Project Name:** 

City wide Streetscape Plan

**Project Category: Roadway** 

## **Purpose**

To plan, develop and implement a City wide Streetscape Plan,

#### Need

A well planned and designed City wide streetscape project(s) will provide for many amenities as described below. These amenities will contribute to significantly enhance the appearance of the City. Thus making it very attractive and pleasant not only to residents, but to visitors as well.

# **Description**

Identify, develop and prioritize major corridors and boulevards projects. Include special focal points and intersection treatments; theme planting; landscape and related amenities, providing sidewalk and related treatment; street lighting; developing criteria for signals, signage, pavement types, etc.

### Cost:

Planning: \$20,000 per corridor

Design: TBD Construction: TBD

